1988

ALASKA PENINSULA - ALEUTIAN ISLANDS AREAS

SALMON AND HERRING ANNUAL MANAGEMENT REPORT

By:

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and

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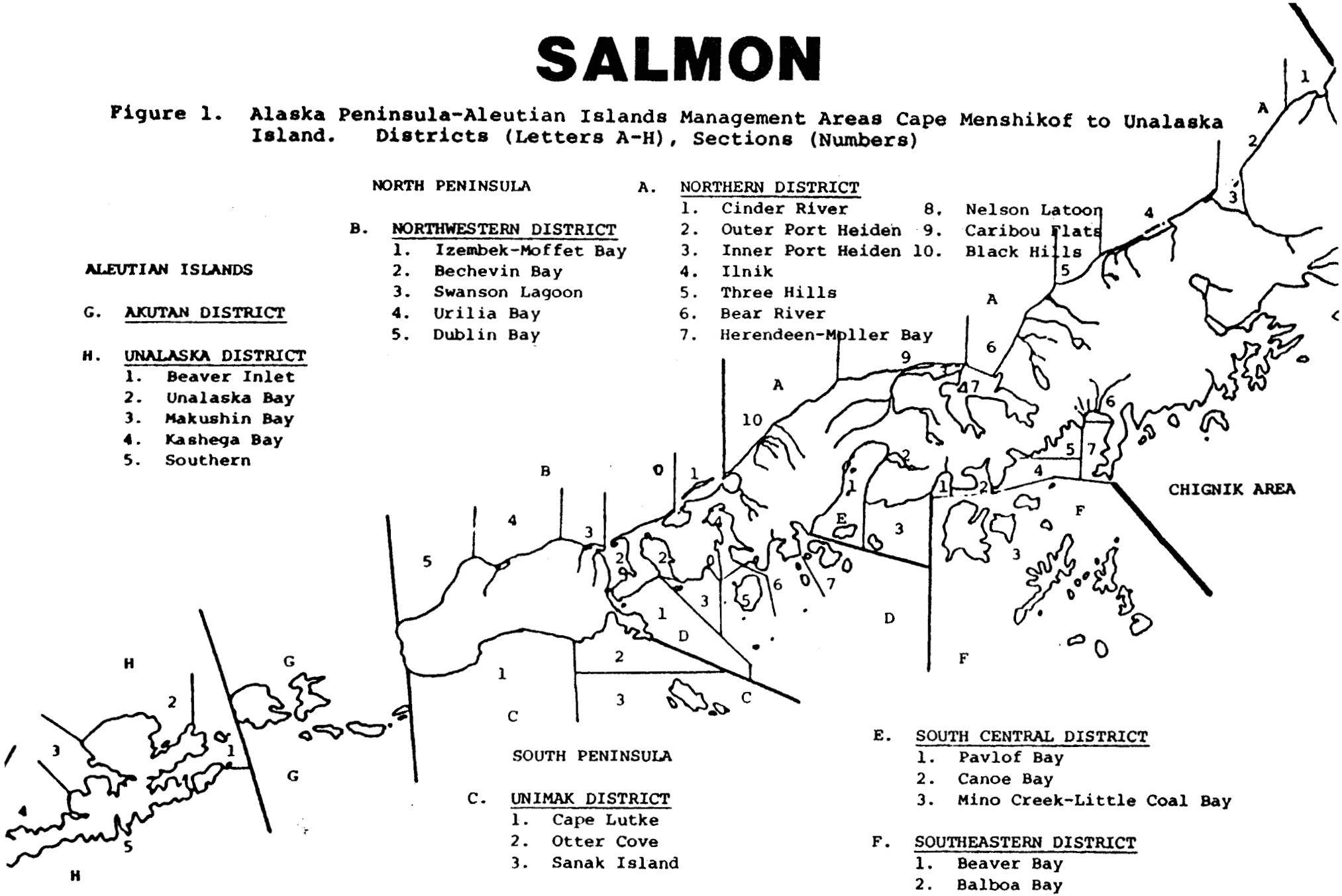
SALMON

Figure 1. Alaska Peninsula-Aleutian Islands Management Areas Cape Menshikof to Unalaska Island. Districts (Letters A-H), Sections (Numbers)



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GENERAL INFORMATION

The Alaska Peninsula-Aleutian Islands Area includes all of the Aleutian Islands, the Bering Sea (north) side of the Alaska Peninsula west of Cape Menshikof and the Pacific (south) side of the Alaska Peninsula located west of Kupreanof Point. No commercial salmon or herring fishing effort presently occurs west of Unalaska Island.

The area constitutes permit Area M for both salmon and herring. During January through June, Area T (Bristol Bay) salmon fishermen are allowed to fish during the open season in the Port Heiden and Cinder River Sections. During August through December Area T fishermen can commercially fish in the Ilnik, Port Heiden, and Cinder River Sections.

Unlike salmon which is under limited entry to commercial fishing, herring fishing is open to anyone wishing to purchase an Area M herring interim use permit from the state.

The area headquarters is located at Cold Bay with other field offices located at Sand Point and Port Moller. The Dutch Harbor office although primarily a shellfish-bottomfish office is vital to management of herring and salmon stocks. Assistance in monitoring the Port Heiden and Cinder River stocks is given by the Chignik Area salmon management staff.

An ADF&G pilot equipped with a Piper Supercub (on wheels) and a DeHaviland Beaver (on wheel floats) provides much of the aircraft needs. A second pilot with a Supercub (on wheels) is based at Chignik and assists in Alaska Peninsula Area operations. Local air taxis utilized include Aleutian Air (at Dutch Harbor), Peninsula Airways and Kenai Floatplane Service. The Alaska Department of Public Safety Gruman Goose is also used.

The M/V RESOLUTION is used to transport supplies and to monitor the South Unimak June fishery.

1988 FIELD PERSONNEL

Employee	Title and/or Location/Duty
Arnie Shaul, H, M	Area Management Biologist
Len Schwarz, H, M	Assistant Area Management Biologist
Bob Berceli, H, M	FB I, Management Program Assistant
Hal Terry, H, M	Airplane Pilot I
Steve Krueger, H, M, R	FT III-Port Moller, Nelson River
Joe Krueger, H, M	FT III-Canoe Bay, Middle Lagoon, Thin Point Cove
Tim Ward, M	Resolution, Urilia Bay, Thin Point Cove
Chris Sundby, M	FB I-Nelson River, Middle Lagoon
Joe Dinnocenzo, M	FT III-Thin Point Cove
Dean Beers, M	FT III-Bear Lake
Jeff Bulla, M	FT II-Bear Lake
Jim McCullough, R	Area Salmon Research Biologist
Mark Weinberger, R	FB I-King Cove, Bear Lake
Tracy McKinion, R	FT III-Port Moller
Stephanie Nedock, R	FT I-Port Moller, Bear Lake
David Fredricks, R	FT I-King Cove
Joe Hinton, R	FT I-Port Moller
Sheri Weinberger, R	FT I-King Cove

H = Herring
M = Salmon Management
R = Salmon Research

ALASKA PENINSULA AND ALEUTIAN ISLANDS SALMON AREA MANAGEMENT BIOLOGISTS

Years	Area Management Biologist
1960-1961	Dexter Lall
1962-1978	Glenn Davenport
1979-1988	Arnie Shaul

Note: Prior to 1974 the above had shellfish management responsibilities in addition to salmon and herring.

COMPANIES PURCHASING SALMON AND HERRING
IN ALASKA PENINSULA AND ALEUTIAN ISLANDS AREAS
DURING 1988

(S) Salmon (H) Herring

	Company Name and Home Office	Processing Plants
(S)	Aleutian Processors, Inc. P.O. Box 79021 Seattle, WA 98199 (206) 283-6605	Aleutian Processor 581-1671 or 1669 (Located in Dutch Harbor)
(S)	All Alaskan Seafoods, Inc. 130 Nickerson St., Suite 307 Seattle,WA 98109 (206) 285-8200	NORTHERN ALASKAN WSL 5879 (Contacted through Dillingham 842-5279 FAX 842-5395)
(S)(H)	Alyeska Seafoods P.O. Box C-5030 Seattle, WA 98105 (206) 323-3200	Unalaska Shoreplant 581-1211 or 1212
(S)	ANPAC, Inc. P.O. Box 92520 Anchorage, AK 99509 (907) 561-1399	Anchorage Shoreplant Nushagak
(S)	Chugach AK Fisheries, Inc. 4241 21st Ave. West, Suite 204 Seattle, WA 98199 (206) 284-0804	Uganik Shoreplant
(S)	Crusader Fisheries, Inc. P.O. Box 692 Kodiak, AK 99615 (907) 486-3147	CRUSADER SEA LEGEND WYH 5118
(S)	FAVCO, Inc. P.O. Box 190968 Anchorage, AK 99519 (907) 278-1525	Anchorage Shoreplant
(S)	New West Fisheries, Inc. 1100 11th Street Bellingham, WA 98225 (206) 734-9050	NEW WEST
(S)	North Coast Seafood Processors P.O. Box 17538 Seattle, WA 98107 (206) 789-5108	POLAR BEAR WE 6476

COMPANIES PURCHASING SALMON AND HERRING
IN ALASKA PENINSULA AND ALEUTIAN ISLANDS AREAS
DURING 1988

-continued-

(S) Salmon (H) Herring

	Company Name and Home Office	Processing Plants
(S)(H)	Oceanic Seafoods Company 8221 44th Avenue West Mukilteo, WA 98275 (206) 745-3398	HARVESTER WXN 3719
(S)	Pan Pacific Seafoods, Inc. 150 Nickerson Suite 103 Seattle, WA 98109 (206) 283-1889	PACIFIC PRODUCER
(S)(H)	Peter Pan Seafoods, Inc. 1000 Denny Building Seattle, WA 98121 (206) 728-6000	Port Moller Shoreplant King Cove Shoreplant BLUE WAVE WTQ 5140
(H)	Queen Fisheries, Inc East Point Seafoods Bldg. C-3 Fishermen's Terminal Seattle, WA 98119 (206) 284-7571	Dutch Harbor Shoreplant
(S)	Sans Souci Seafoods P.O. Box 543 Dutch Harbor, AK 99692 (907) 581-1533	Dutch Harbor Shoreplant
(S)(H)	SnoPac Products, Inc Box 3001 Bothell, WA 98041 (206) 231-2296	BACARRA
(S)(H)	Trident Seafoods 5303 Shilshole Ave. N.W. Seattle, WA 98107 (206) 783-3813 or 3818	Sand Point Shoreplant Akutan Shoreplant SEA ALASKA WYX 2858 BILLIKIN WYX 2752 BOUNTIFUL WSX 6805 NEPTUNE WRC 8312
(S)(H)	Unisea, Inc Dutch Harbor Seafoods, LTD P.O. Box 97019 Redmond, WA 98073 (206) 881-8181	UNISEA (In Dutch Harbor) (Alaska Peninsula Salmon were processed by Peter Pan Seafoods)

SALMON

GENERAL BACKGROUND

The salmon fisheries in the Alaska Peninsula Area date back to at least 1888 when canneries were constructed (but remained for a very brief period of time) at Orzinski Bay (Orzenoi Bay) and Thin Point Cove. However, the earliest catch records for the Alaska Peninsula Area date back only to 1906. The first Aleutian Islands Area salmon catches were in 1911.

Early catches were dominantly sockeye with a few king and coho salmon. The first year in which pink and chum salmon catches exceeded 500,000 each was 1916. Area wide historical catches are listed in Table 1.

A large portion of fishermen's earnings along the South Peninsula come from harvesting migrant salmon. The South Peninsula interception fisheries include the South Unimak (also known as False Pass) June fishery, the Shumagin Islands June fishery, and the Southeastern District Mainland (also known as Balboa-Stepovak or just Stepovak) fishery.

Tables 6-9 contain data regarding the Southeastern District Mainland fishery.

The Southeastern District Mainland fishery, also referred to as Stepovak or Balboa-Stepovak, includes the Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, East Stepovak, and Stepovak Flats Sections. Effort during June and most of July is primarily targeted on Chignik destined sockeye. There is also a local sockeye run (Orzenoi or Orzinski Bay run) in the Northwest Stepovak Section and early July chums in the Stepovak Flats Section. Therefore the Northwest Stepovak and Stepovak Flats Sections are managed on a local stock basis throughout the season. After July 25, the entire area is managed for local stocks.

During late July through mid August pink and chum runs are peaking. The fishery is usually closed during mid and late August to top off escapements and is opened again in September to harvest coho. Traveling sockeye are moving through the area throughout the entire season.

Through July 25 as near as possible to 6 percent of the total estimated Chignik destined sockeye catch is allowed to be taken in that portion of the Southeastern District Mainland located outside the Northwest Stepovak Section. However, if it appears that the Chignik Area sockeye catch will not reach 600,000 through July 25, then there will be no fishery targeted on Chignik sockeye in the Southeastern District Mainland or in the Cape Igvak Section of the Kodiak Area. No fishing is targeted on Chignik stocks in the Southeastern District Mainland or Cape Igvak fisheries until the run passing through those locations is assessed to be in excess of escapement needs. The assessment is made at Chignik.

The total Chignik destined sockeye catch is estimated by adding 80 percent of the Southeastern District Mainland (excluding Northwest Stepovak Section) catch to 80 percent of the Cape Igvak catch plus the entire Chignik Area sockeye catch.

The present management plan was first used for the Southeastern District Mainland during the 1985 season. A similar plan has been used at Cape Igvak since 1978.

Historically, the Southeastern District Mainland fishery has been minor. During 1974 through 1977, the fishery was open on a day to day basis with Chignik Lagoon. During some seasons, such as 1977 when little fishing was required to harvest large runs in Chignik Lagoon and daily interception rates were low, it was a disaster for Southeastern Mainland fishermen.

For the 1978 season, the Board of Fisheries allowed three days per week in the Southeastern District Mainland fishery through July 10 and made set gillnets the only legal gear during that period (both seines and set gillnets are still legal after July 10). Interception rates were low despite strong Chignik runs and catches were poor for the few set gillnetters in the Southeastern Mainland fishery. Up through this time a maximum of 12-15 gillnetters participated in this fishery.

During the winter of 1978-79, the Board of Fisheries increased fishing time to five days per week but specified that not more than 60,000 estimated Chignik sockeye could be taken through July 10. However, the fishery could be closed if it became apparent that a closure was needed to assure the attainment of Chignik sockeye escapement needs. Also, if the Chignik Area sockeye harvest exceeded 1,000,000 sockeye before July 10, the Southeastern District Mainland fishery could continue beyond he 60,000 ceiling. This provision was a major factor during the 1984 season.

During 1979 through 1982 Southeastern District Mainland fishermen experienced good seasons even though closures were needed at times because of weak Chignik escapements. During this period, gear level increased to 20-25.

During 1983, the gear level did not change drastically but the fishery demonstrated its ability to catch a large number of fish during a short period of time when the July 7-8 total sockeye catch was approximately 49,000. The 1983 season was an outstanding one for Southeastern District Mainland fishermen with the season estimated interception of Chignik destined sockeye reaching 217,000. Most of the sockeye were taken between July 10 and August 10.

The 1984 season saw a dramatic increase of set gillnet gear, with the total reaching approximately 48. Several of the units of

gear were operated by purse seine fishermen who also had set net permits. Consequently, there were roughly 43 full time set net fishermen. Due to the huge early Chignik run, the large number of these fish available in the Southeastern District Mainland, and the large amount of gear, only 6 days were required to harvest 60,000 estimated Chignik destined sockeye. However, the fishery was closed for only 3 days before the Chignik catch reached 1,000,000. The Southeastern District Mainland fishery was reopened on June 14 using the fishing periods listed in the regulation book (5 days/week).

It was anticipated that the 1984 second Chignik sockeye run would be very strong. This later proved to be untrue. The Chignik escapement goal was reached on the second run only after considerable curtailment of the Southeast Mainland, Chignik and Cape Igvak (Kodiak Area) fisheries during mid July.

The 1984 Southeastern District Mainland interception of Chignik destined sockeye through July 25 was 385,000.

In addition to the gear increase, another major reason for the large sockeye catches in the Southeastern District Mainland fishery in 1983, 1984, and 1986 appears to be an increase in the proportion of the Chignik run migrating through this area rather than coming from the east.

The 1985, 1986, 1987, and 1988 catch of Chignik destined sockeye salmon through July 25 was 51,000 (5.88%), 118,000 (6.70%) 147,000 (6.91%) and 19,000 (2.70%) respectively).

For further details regarding the Southeastern District Mainland fishery check the regulations under 5 AAC 09.360. **SOUTHEASTERN DISTRICT SALMON MANAGEMENT PLAN** later in this report (under Commercial Fishing Regulations).

Tables 10-28 contain data regarding the South Unimak and Shumagin Islands June fisheries and the amount of gear used in the Alaska Peninsula and Aleutian Islands Areas.

The South Unimak and Shumagin Islands June fisheries date back to at least 1911. The dominant stocks targeted by these fisheries are Bristol Bay bound sockeye, which has caused controversy between Peninsula-Aleutian and Bristol Bay fishermen for many years. During the late sixties, the South Unimak-Shumagin fisheries were open to fishing seven days per week regardless of Bristol Bay run strength. This caused many debates at Fish and Game Board meetings, with special meetings occurring over this one issue during the early seventies. South Unimak-Shumagin June management strategy was decided on a year by year basis during 1972-74 due to very low anticipated Bristol Bay sockeye returns.

Beginning in 1975, the Alaska Board of Fisheries implemented an allocation plan where the South Unimak-Shumagin June fisheries would be managed on guideline harvest levels allocated by the basis of predicted Bristol Bay inshore sockeye harvests. Based on historical catch information, 6.8 percent of the forecasted inshore Bristol Bay harvest was allocated to the South Unimak June fishery and 1.5 percent allocated to the Shumagin Islands. To reduce the possibility of overharvesting any segment of the Bristol Bay run, the guideline harvest level is allocated to discrete time periods based on historical catch data. The allocation by time period is listed as follows:

	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
12 - 18	29%	28%
19 - 25	51%	41%
26 - 30	15%	22%
Totals	100%	100%

If the guideline harvest for an individual time period is not reached, the unharvested portion is lost to the fishery. If the guideline harvest for an individual time period is exceeded, the

overharvest is subtracted from the total season allocation. Chum salmon are taken incidental to sockeye during the South Unimak-Shumagin Islands June fisheries. An unusually large harvest of approximately 1.1 million chums during 1982 along with a failing fall Yukon River chum run brought pressure from fishermen in the Arctic-Yukon-Kuskokwim (AYK) Region to curtail or eliminate the fishery. Unlike the sockeye which are primarily bound for one area (Bristol Bay), chums are headed for a variety of areas ranging from Japan to Kotzebue to Prince William Sound. A significant portion is destined for AYK, although not necessarily fall Yukon River.

To limit the chum by catch, the Board of Fisheries placed further restrictions in the form of windows on the South Unimak-Shumagin fishery beginning in 1984. The windows consist of allowing no more than 96 hours of fishing during a seven day period and no more than 72 consecutive hours.

During 1986 only, the following additional restrictions were used.

1. No fishing before June 11.
2. No fishing during June 26-30 and the loss of that period's sockeye allocation.
3. A 400,000 chum salmon catch ceiling.

These restrictions plus a low availability of sockeye resulted in only 470,000 of the 1,107,000 sockeye allocation being taken.

During the fall 1986 Board of Fisheries meeting, the Board adjourned with three members resigning without taking any action.

A tagging program was carried out during 1987, indicating that chums go to a variety of places after passing the South Peninsula in June. The Yukon River fall contribution was small during this year. Details of the study have been printed in Alaska Department of Fish and Game Regional Information Report No. 5788-03.

During the spring 1988 meeting, the Board of Fisheries placed a 500,000 (fish) chum salmon cap on the South Unimak-Shumagin Islands June fisheries (once a total of 500,000 chums are harvested the fishery will be closed). It will be very difficult or impossible to harvest the sockeye allocation during many years due to the chum cap.

In 1988, the South Unimak sockeye harvest was reduced by approximately 669,000 fish by the 500,000 chum cap. This reduction is in addition to the estimated reduction of 117,000 sockeye that would have been caused by other restrictions (no more than 96 hours to be fished in any 7 day period nor more than 72 consecutive hours). The Shumagin fishery harvested its 1988 sockeye allocation.

For more details regarding the South Unimak-Shumagin Islands June fisheries, check the regulations under 5 AAC 09.365. **SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON MANAGEMENT PLAN** later in this report (under Commercial Fishing Regulations).

Tables 29-31 contain South Peninsula catch and total run information.

The major species produced by South Peninsula streams are pink salmon. Runs fluctuate dramatically over time due to the magnitude of parent escapements and environmental conditions. During the 1973-88 period, commercial catches (not including June catches) have varied from 36,000 in 1973 to 10,669,000 in 1984. Most systems produce large runs on both even and odd year cycles, except most of the streams between Cold Bay and Unimak Bight which are basically even year producers. Dry Lagoon and Apollo Creeks on Unga Island also seem to be even year cycle systems. Pink salmon runs usually arrive in force about July 20 and peak about August 1. After August 15-20 the fish quality is usually poor due to water marking.

Chum salmon are the second most important locally produced species along the South Peninsula. Not including June catches, the 1962-88 chum salmon catches ranged from 34,000 fish in 1974 to 1,399,000 during 1986. Chum salmon runs are somewhat more stable than pink salmon due to the presence of more than one age class within each run and the tendency for chums to select spawning locations which are less susceptible to scouring and freezing. Chum salmon runs start earlier and last longer than those of pink salmon and there is a large variation in run timing between different chum stocks.

The South Peninsula has numerous sockeye salmon stocks. Most stocks are small although Thin Point and Middle Lagoon (Morzhovoi Bay) have a history of substantial runs during the 1920's and 1930's. It is believed that these two systems can be brought back to their former levels by a good escapement monitoring and enforcement program. Thin Point and Morzhovoi Lakes are suspected of having rearing capacities greatly in excess of the spawning capacities. Therefore the potential to produce substantially larger runs through supplemental methods exists. Orzinski (Orzenoi) Lake is an important contributor to Southeastern District catches.

Post June South Peninsula sockeye catches are often substantial. Many of the fish are taken in the Balboa-Stepovak fishery which targets on Chignik destined sockeye. However, a substantial number (50,000 to 400,000) are taken annually in the Shumagins and lesser numbers taken throughout the balance of the area. Many of these fish are undoubtedly bound for other areas, although South and North Peninsula streams are contributors.

Most South Peninsula coho are taken while the fishery is targeted on pink and chum salmon during mid July to mid August and a smaller amount during September. The fishery is usually closed during late August to achieve good pink and chum escapements.

Historically South Peninsula coho catches have demonstrated long periods of different abundance levels. From 1923 through 1946 catches stayed at a high level, averaging 148,000 fish annually. During 1947 through 1958 the average fell to 50,000. The 1959-77 average South Peninsula coho catch was only 12,000. However catches jumped to an average of 244,000 during 1978-88. The record high catch was 505,500 coho during 1988. It should be pointed out that the Aleutian Islands catches were combined with the South Peninsula during 1928 through 1950, however, the Aleutian contribution was probably insignificant based on years when Aleutian catches were kept separate. The record Aleutian Islands Area documented coho catch was 4,400 fish in 1918 and the catch is less than 200 during most years.

King salmon are of minor importance along the South Peninsula averaging only 9,900 fish harvested during 1979-88. There are no king salmon streams along the south side of the Alaska Peninsula Management Area and the Chignik River is the only king producer on the Pacific side of the entire Alaska Peninsula.

The Aleutian Islands Area produces runs of sockeye, coho, pink, and chum salmon. However, it is only the pink salmon which have proven to be of major commercial importance.

The following islands produce large pink salmon runs during some years:

Unalaska	Atka
Umnak	Adak
Amlia	Attu

Tanaga, Kanaga, and Kiska Islands all have at least one important pink salmon stream.

Except for occasional fishing on Umnak Island during the early nineteen sixties and probably the fifties, all commercial effort has been confined to Unalaska Island, with the exception of a 1963 Attu expedition.

It is quite likely that Attu salmon runs have been heavily impacted by Japanese high seas fishing as the Japanese were still allowed to fish in the proximity of the island until 1988. Japanese salmon fishing was closed by court action during 1988 in all U.S. waters to protect marine mammals and birds. The other islands may contribute by a lesser degree to foreign fishing.

Aleutian Islands pink salmon runs tend to be much larger during the even year cycle. Unalaska Bay has a history of producing large runs during both odd and even years.

Pink salmon runs are very unstable in the Aleutians. They produce legendary high returns at times and then collapse for no apparent reason.

Aleutian pinks and sockeyes tend to be of smaller size than those of Alaska Peninsula stocks.

Prior to 1979, markets were a limiting factor at Unalaska. There was often no market unless pink salmon abundance warranted sending tenders from False Pass or King Cove. Some fish (usually sockeye) were salted by the fishermen. From 1979 to the present, most fish have been processed by buyers at Unalaska-Dutch Harbor or Akutan.

The record Aleutian pink salmon catch was approximately 2.6 million fish during 1980 (roughly 2 million were taken out of Makushin Bay alone).

Unalaska pink runs seem to arrive about the same time as those of the South Peninsula. However, there is considerable variation from year to year as to when pinks enter Unalaska streams as well as timing between various streams. This is a different situation than found on the South Peninsula where pink salmon entry into

streams is less variable. During large runs Unalaska pinks may trickle in throughout September.

Tables 32-46 contain historical catch and total run information regarding North Peninsula salmon.

It should be noted that except for Bear River sockeye, Sapsuk River sockeye, and Sapsuk River kings and chums from 1962 through 1985, all escapement figures used in this report are indexed totals. The indexed totals are likely close to but a little lower than the actual totals. Consequently there will be differences after 1984 between figures used in Area Management Reports and those in formally published reports (Technical Data Reports, Bulletins, etc.). The indexed totals continue to be used for historical comparisons.

Sockeye are the dominant species along the North Peninsula. The major producing systems are Bear River, Nelson Lagoon, Meshik River, Sandy River, Ilnik, and Urilia Bay. Bear River is the top producer with Nelson Lagoon being second. In addition to those listed above, there are numerous less important systems.

North Peninsula sockeye catches averaged 239,500 during 1962-1975, 669,600 during 1976-78, and 1,828,700 during 1979-88. Catches during the 1962-88 period ranged from 172,000 in 1973 to 2,601,000 (record high) during 1985.

The peak of North Peninsula sockeye catches occur during the first 10 days of July. The Urilia Bay return is somewhat earlier. Most returns are completely through the fishery by the end of July. However, Bear River's return lasts well into September and sometimes has a second peak in August. There is also a late (early August) small sockeye return in Nelson Lagoon, these fish are believed to spawn in lakes (mainly tributaries of the David's River) along the west side of the Nelson Lagoon drainage.

Chums are the second most important North Peninsula salmon species. Catches have averaged 465,400 during 1979-88. The record catch was 797,000 fish during 1984.
The major chum producing locations are the Izembek-Moffet Bay, Herendeen-Port Moller Bay, Bear River, and Bechevin Bay Sections.

The North Peninsula chum runs (with some variation among stocks) usually begin in June and continue at a steady rate throughout July and through early August. Nelson Lagoon's run (occasionally strong) begins in late July and is of short duration. Trader's Cove and Warm Springs chum returns occur during August through early September.

Coho are the third most important commercial salmon species on the North Peninsula. Due to the lateness of the runs, virtually no fishing effort was directed towards North Peninsula coho until 1948, and then only in limited locations. During recent years more stocks have been exploited. However, there are undoubtedly stocks on both sides of the Alaska Peninsula which have not been identified. Escapement information is very limited.

North Peninsula coho catches averaged 33,500 fish per year from 1948 through 1978. The catch jumped dramatically to a 164,500 average during 1979-88, with catches ranging from 75,100 during 1983 to 238,000 in 1982.

Nelson Lagoon is the largest North Peninsula coho producer. Other major runs include Port Heiden, Cinder River, Ilnik, and Swanson Lagoon.

There is some variation in run timing among stocks, however coho returns generally begin about August 1, peak during the last two weeks in August and the first week in September, and are essentially over by September 15. However, there are exceptions. For example, the Ocean River coho run seems to peak during late September. There is also a lot to be learned concerning North

Peninsula coho stocks.

King salmon are only the fourth ranked salmon species in commercial importance along the North Peninsula. However, they are extremely important to some individuals. For example, kings are one of the two most important species at Port Heiden and are an important contributor to the Nelson Lagoon economy. The record catch was 44,200 fish during 1916. The harvest has averaged 20,100 fish during 1979 through 1988, ranging from 11,700 in 1986 to 30,100 during 1982.

Nelson Lagoon, Port Moller, and Port Heiden are the major North Peninsula king salmon producing locations.

The king salmon run begins during the last week in May, peaks during mid and late June then gradually declines until it is essentially over in late July. Most spawning occurs during the first half of August.

Pink salmon are the least important North Peninsula salmon. Returns are quite small and value per fish is lower than the other species. However Bechevin Bay has occasionally produced large pink salmon returns during even numbered years.

It is not known why the North Peninsula is not a much larger pink salmon producer than it is. Some of the streams look like good producers and do occasionally receive large enough pink salmon escapements to produce a substantial return. However the returns fail to build and there likely is a feature in the marine environment which is not conducive to good pink salmon survival. The one area (Bechevin Bay) that has produced large pink salmon returns possibly should be considered part of the South Peninsula.

1988 SALMON SEASON

The early Chignik sockeye run was weak during 1988 and Chignik did not reach it's 600,000 catch until close to July 25. Therefore fishing was not targeted on Chignik stocks in the Southeastern District Mainland fishery until July 24 and 25. Approximately 5,400 Chignik sockeye were taken incidental to fishing for local chum salmon in the Stepovak Flats Section during July 11-23. For the season through July 25, the Southeastern District Mainland fishery harvested an estimated 19,000 Chignik destined sockeye, 2.70% of the entire Chignik destined harvest.

In 1988, in an attempt to lower the chum catch, no fishing was allowed until June 11 (last day of the first quota period) when 14 hours were granted to both South Unimak and Shumagin Islands fisheries. Effort on June 11 was very light due to a price dispute and fear by fishermen of catching an excessive number of chums in relation to sockeye. In the Shumagins, most of the set gillnet fishermen fished due to the fact that this gear type takes very few migrant chums. At South Unimak, the set gillnetters and many of the drift gillnet fishermen fished. The seiners did not participate until June 18 when a price settlement was reached. The June 11 harvest consisted of 7,900 sockeye and 700 chums in the Shumagins and 11,500 sockeye and 18,500 chums at South Unimak. The June 1-11 sockeye quota were 25,000 and 63,000 for the Shumagins and South Unimak, respectively.

Due to the high chum to sockeye ratio on June 11 at South Unimak, the next fishing period was delayed until June 15. From June 15 through June 18 (last day of second quota period) 78 hours of fishing time was allowed in the Shumagins, resulting in a catch of 98,800 sockeye and 20,000 chums. Purse seiners participated during the last 16 hours when 67,700 sockeye and 16,000 chums were harvested. The June 12-18 quota was 78,000 sockeye.

The South Unimak fishery was open for 38 hours during June 15 and 16 resulting in a harvest of 122,000 sockeye and 105,900 chums. South Unimak was open again for 6 hours during June 18, this time with all the drift gill-netters and seiners participating. The June 18 catch was 58,900 sockeye and 49,900 chums, bringing the total June 12-18 catch to 181,000 sockeye and 155,800 chums. The June 12-18 sockeye quota was 366,000.

By the end of June 18, the combined chum catch was 195,000.

The next fishing day was June 21 when 12 hours were allowed in the Shumagin fishery resulting in a catch of 38,600 sockeye and 8,500 chums. The June 21 (15 hours) South Unimak fishing period resulted in a harvest of 82,200 sockeye and 64,700 chums.

A 42 hour fishing period during June 23 and 24 in the Shumagins produced a harvest of 102,400 sockeye and 23,700 chums. This period brought the June 19-25 Shumagin sockeye harvest to 141,000 as compared to the quota of 115,000 for the period.

At South Unimak, a 31 hour fishing period during June 22-23 produced a harvest of 151,900 sockeye and 138,300 chums. This brought the June 19-25 South Unimak sockeye harvest to 234,100, far below the period quota of 644,000.

The accumulated Shumagin-South Unimak chum harvest through June 25 stood at 427,600, less than 75,000 remained to be taken before the chum ceiling was reached. Less than one day of fishing could be allowed during the June 26-30 quota period.

A 12 hour fishing period during June 27 in the Shumagins produced a harvest of 34,500 sockeye and 8,900 chums. This brought the season Shumagin harvest to 282,200 sockeye, exceeding the quota of 279,000. The season Shumagin chum harvest was 61,900.

At South Unimak, 16 hours of fishing were allowed during June 27

resulting in a harvest of 49,000 sockeye and 90,000 chums. The June 27 catch brought the accumulated South Unimak sockeye harvest to 474,500, less than 40% of the allocation (1,263,000 sockeye). The season South Unimak chum catch was 464,800, bringing the combined Shumagin-South Unimak harvest to 526,700. With the 500,000 chum salmon ceiling exceeded, the 1988 South Unimak salmon fishery was terminated.

Key points from the 1988 Shumagin Islands-South Unimak season are:

1. Chum abundance was very high, approximating that of sockeye.

2. The Shumagin Islands fishery had much less difficulty taking it's sockeye allocation than was the case at South Unimak.

3. South Unimak had a sockeye to chum ratio of only 1.02:1 while in the Shumagins the radio was 4.56:1. Major factors contributing to the difference between the two fisheries are:

    a. Set gill-netters catch a low percent of chums when fishing on traveling stocks along the South Peninsula. In the Shumagins set gill-net gear accounted for 37% of the sockeye harvest versus 3% at South Unimak.

    b. Due to Shumagin seiners having to take turns setting, it was feasible to release chums before making another set. This is not the case at South Unimak where seiners fish non-stop. Consequently many seine caught chums were released in the Shumagin fishery. Drift gill-netters released chums early in the season at South Unimak but stopped when buyers began paying higher prices.

4. Fishermen demonstrated they will release chums in order to

minimize the impact of chum catches on sockeye allocations. While releasing seine caught chums in good condition may be a feasible method of minimizing chum catches, survival of gillnet caught salmon is questionable.

Had only regulations (windows) other than the 500,000 chum ceiling been in place, the approximate harvest would have been as follows:

	Sockeye	Chums
South Unimak	1,098,000	1,164,000
Shumagin Islands (actual)	282,000	62,000
Total	1,380,000	1,226,000

(117,000 sockeyes below combined sockeye allocation, 700,000 chums above actual chum catch.)

Approximate sockeye harvest had no restrictions been in place to reduce chum harvest:

	Sockeye	Chums
South Unimak	1,263,000	1,389,000
Shumagin Islands (actual)	282,000	62,000
Total	1,545,000	1,451,000

(Chum harvest 225,000 over projected harvest with only windows in effect and 925,000 fish over projected harvest with 500,000 chum ceiling in effect.)

Purse seiners harvested 62.8 percent of the sockeye and 69.7 percent of the chums in the Shumagins with set gill-netters taking the balance. At South Unimak, the percent of total catch by gear type was as follows:

	Purse Seine	Drift Gill-net	Set Gill-net
Sockeye	29.8	67.0	3.2
Chum	33.6	65.8	0.6

The number of purse seiners participating in the South Peninsula June fisheries totaled 89 as compared to 84 in 1987 and 102 in 1986. A total of 147 drift gill-net vessels fished at South

Unimak during June as compared to 140 and 153 in 1987 and 1986 respectively.

The number of set gill-net permits being used at South Unimak and in the Shumagins during June was 63, an increase of one over 1987. Eleven set gill-netters fished South Unimak with the balance operating in the Shumagins. The 1976-88 South Peninsula gear levels are listed in Table 26.

The 1988 South Peninsula pink salmon harvest after June was 6,826,000 fish, well above the previous 10 year average of 5,179,000. The indexed total escapement of 2.84 million pink salmon was the third highest on record (beginning in 1962).

The July - September 1988 chum salmon return was very strong resulting in a harvest of 1,379,000 fish, second highest in at least 25 years. The indexed total escapement of 496,000 was above the previous 10 year average of 436,000.

Large numbers of sockeye and coho were taken during July and August when fishing was being managed for pinks and chums. The total South Peninsula post June sockeye and coho catches were 716,000 (including Southeastern District Mainland) and 506,000 respectively. A total of 158,000 sockeye were taken along the Southeastern District Mainland, leaving a post June balance of 558,000 sockeye taken in the remainder of the South Peninsula.

The post June Shumagin Islands catches of sockeye and coho were 416,000 and 347,000 respectively. At South Unimak, 71,000 sockeye and 84,000 coho were taken after June. The Shumagin post June catch of pinks and chums were 3,358,000 and 413,000 respectively, while 245,000 pinks and 133,000 chums were harvested at South Unimak.

The indexed total South Peninsula sockeye escapement was 74,000. Coho escapement information is very incomplete, but based on

available information was probably in the 50,000 to 100,000 range. In streams where coho counts are not available, estimates are based on streams where data exists. The amount of coho rearing habitat is an important consideration when estimating escapements in streams where counts were not made, when comparing to streams where escapement counts were made. Catch information is also considered.

Factors contributing to the high incidental catches of sockeye and coho during July and August were:

1. A very high abundance of both sockeye and coho along the South Peninsula.

2. Large pink and chum salmon runs to South Peninsula streams, therefore liberal fishing time in order to harvest the surplus.

3. A total of 155,000 sockeye were taken along the west side of Unga Island and at Mountain Point on Nagai Island. Very little fishing effort, if any, occurred in these areas prior to 1986. However, the West Unga-Mountain Point coho catch was only 29,000 as compared to 318,000 in the more traditional Shumagin fishing areas. The West Unga-Mountain Point post June pink and chum salmon harvests were 899,000 and 92,000 respectively.

Except for West Unga-Mountain Point, the Shumagin sockeye and coho catches came from the same locations fished extensively during the previous 70 to 80 years. Fishing along the South Peninsula capes enables the fleet to harvest pinks and chums while fish quality is still high, prevents processors from being glutted, and allows assessment of stock strength of fish.

In 1986, a substantial amount of fishing effort was exerted on the west side of Unga Island. Catch statistics for West Unga are

not accurate for 1986, but the sockeye catch was probably in the vicinity of 50,000 fish. In 1987, fishing occurred at Mountain Point (southwest tip of Nagai Island) as well as West Unga. The 1987 post-June West Unga-Mountain Point catch was 90,000 sockeye, 1,000 coho, 35,000 pinks, and 71,000 chums. An additional 15,000 sockeye and 1,000 chums were taken in June.

In 1988, the West Unga-Mountain Point post-June harvest was 155,000 sockeye, 29,000 cohos, 899,000 pinks, and 92,000 chums. The June catch totaled less than one thousand fish of each species.

The West Unga-Mountain Point 1988 sockeye and coho harvest greatly exceeded that of 1987 due to the much larger pink salmon runs which resulted in more fishing time allowed in 1988. Pink salmon and not sockeye attracted much of the 1988 effort.

Salmon seem to be traveling in a southeasterly direction when arriving at West Unga-Mountain Point.

In 1987 the entire post-June salmon catch at West Unga-Mountain Point was taken during July. In 1988, 59% of the sockeye, 24% of the coho, 32% of the pinks, and 61% of the chums were taken in July.

Table 1 lists the Alaska Peninsula-Aleutian Islands Areas salmon catches from 1922-1988. The large coho catches from 1924 to 1946 were probably taken in the same locations as during recent years.

The Unalaska Island pink salmon run was by far the strongest since 1984. Most Unalaska Bay and Makushin Bay Section streams received good escapements and spot openings in portions of Unalaska Bay resulted in a harvest of 183,000 pinks. Pink salmon escapements in the Kashega Bay Section were disappointing, though better than those of the parent year (1986). The peak

escapements of pink salmon in traditional Aleutian Islands Area fishing areas (Unalaska Bay, Makushin Bay, and Kashega Bay Sections) totaled 402,000 as compared to less than 75,000 in 1986.

If environmental conditions are favorable, a large pink salmon harvest can be anticipated in the Unalaska Bay and Makushin Bay Sections during 1990.

The North Peninsula king salmon catch totaled 16,800 fish down from the previous 10 year average of 19,800. The indexed total escapement of king salmon was 10,700 which was well below the previous 10 year average of 14,900.

The sockeye salmon catch along the North Peninsula totaled 1,528,000 as compared to the 1978-1987 average of 1,766,000. The indexed total escapement of 615,000 was on target but below the previous 10 year average of 968,000 (sockeye escapement goals were greatly exceeded during late 1970's and early 1980's).

A total of 401,268 sockeye were harvested in that portion of the Ilnik Section near Strogonof Point. The total Ilnik Section sockeye harvest was 494,616. The Strogonof Point fishery is becoming a source of controversy as Area T fishermen feel many of the fish are destined for Bristol Bay Area streams. A stock separation study (using scale pattern analysis) is being done for the first time, however the 1988 results won't be available for at least several months.

The North Peninsula chum salmon catch totaled 393,000 fish which was below the previous 10 year average of 474,000. The 500,000 indexed total chum escapement was 68,000 above the 1978-1987 average. Izembek-Moffet Bay Section accounted for 304,000 of the escapement. The fleet left Izembek-Moffet early to participate in the large South Peninsula pink salmon harvest.
The North Peninsula coho catch of 234,000 was the second highest

on record. As usual, Nelson Lagoon with a catch of 95,400 had the highest coho catch of any section on the North Peninsula. Other sections with harvests over 25,000 fish were Ilnik (35,000), Cinder River (28,500), and Inner Port Heiden (27,300). North Peninsula coho escapement data is very incomplete but based on available information is estimated to be in the 200,000 to 300,000 range. In streams where coho counts are not available, estimates are based on streams where data exists. The amount of coho rearing habitat is an important consideration when estimating escapements in streams where counts were not made, in relation to escapements in systems where coho were enumerated. Commercial catch information is also considered.

During the fall season, 19 Area T vessels in addition to the local Port Heiden fleet fished the overlap area off Port Heiden down to Three Hills. This compares with 17 in 1987 and 18 in 1986.

A total of 19 Area T drift gillnetters and 7 set gillnetters fished the Cinder River Section exclusively. This was up from 10 driftnetters and 5 setnetters during 1987.

SUBSISTENCE SALMON FISHERY

Subsistence salmon catches are estimated from permit return information. Information from returned permits is used to extrapolate catches for all permits issued. There are undoubtedly many fish kept from commercial catches and not reported.

Permits are not required to subsistence fish in the Akutan and Umnak Districts. Consequently no catch estimates are made by the Commercial Fisheries Division for those districts.

Subsistence salmon fishing is not allowed in the Adak District. However a personal use salmon fishery is allowed on Adak and Kagalaska Islands for Alaska residents and military personnel (and their dependents) who have been stationed in Alaska for the preceding 12 months.

1988 subsistence and personal use catch information is contained in Tables 62-67.

METHODS OF CALCULATING INDEXED TOTAL ESCAPEMENTS

Unusual circumstances may cause occasional deviation, but basically the methods of calculating estimated indexed total escapements without the use of a weir or tower are as follows:

King, Sockeye, Coho: These species tend to have a much longer stream life than pink and chum salmon. Therefore, the estimated total escapement is usually the peak escapement. Carcasses are included. However, it is recognized that there are problems in large systems such as Ilnik and Caribou-David's Rivers. The basic problem on large systems is the length of time, expense, and fuel needed to do a thorough survey yet meet more pressing obligations.

The Caribou and David's River complex (including Coastal and other nearby lakes) is so massive a system for the size of its runs that complete surveys will probably never be done. The timing of such surveys would have to coincide with the peak of the South Peninsula pink and chum fisheries.

In the case of Ilnik, numerous management surveys are done while the fishery is being managed for the Ilnik stocks. However, the peak surveys occur after the fishery has tapered off and most effort must be devoted to South Peninsula runs. However, Ilnik is a very important run and more effort is being made to accurately monitor it. The Ilnik sockeye run is of longer duration than the majority of unweired (or towered) North Peninsula sockeye streams. Ilnik sockeye also seem to have a shorter stream life than those in most other shallow water systems. Consequently, Ilnik requires at least two complete surveys or at least one complete survey with fish in the lower area during subsequent surveys being added to a peak count for the system. Again this system justifies more effort and is probably a larger producer than a number of weired systems in other portions of the state. Many of the Ilnik figures listed in this publication are minimal.

Pink and Chum Salmon: A 21-day stream life is used to calculate total pink and chum escapements. Fish in saltwater during the final survey are added.

EXAMPLE

Survey Date	Pinks	Chums	Fish at Mouth
July 10	5,000	0	5,000P
17	25,000	0	10,000P
August 1	100,000	0	10,000P
15	150,000	0	12,000P
			1,000CH
September 1	150,000	5,000	2,000CH
Estimated Total	255,000	7,000	

The estimate of 21 days stream life was used because significant numbers of carcasses seem to appear about three weeks after adult pinks and chums first appear in Alaska Peninsula streams. It is recognized that stream life can vary, however this method is easily duplicated and is comparable from year to year. Variation in stream life is likely a much smaller factor than variation between observers.

With the exception of several small streams, there are no problems of streams being obscured by brush or trees in the Alaska Peninsula and Aleutian Islands Areas. With several exceptions, visibility of spawning grounds is outstanding during periods of normal water flow and clear weather.

Table 1. ALASKA PENINSULA - ALEUTIAN SLANDS SALMON CATCHES (Fish in Thousands)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1906	South Peninsula	0	0	0	0	0	0
	North Peninsula	1.5	135.0	0	0	0	136.5
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**135.0**	**0**	**0**	**0**	**136.5**
1907	South Peninsula	0	0	0	0	0	0
	North Peninsula	1.7	66.5	3.2	1.5	0	72.9
	Aleutians	0	0	0	0	0	0
	Total	**1.7**	**66.5**	**3.2**	**1.5**	**0**	**72.9**
1908	South Peninsula	0	69.4	0	0	0	69.4
	North Peninsula	1.5	166.9	0	0	0	168.4
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**236.3**	**0**	**0**	**0**	**237.8**
1909	South Peninsula	0	108.4	7.2	0	0	115.6
	North Peninsula	1.5	143.0	0	0	1.0	145.5
	Aleutians	0	0	0	0	0	0
	Total	**1.5**	**251.4**	**7.2**	**0**	**1.0**	**261.1**
1910	South Peninsula	0	46.3	5.5	0	0	51.8
	North Peninsula	0	0	0	0	0	0
	Aleutians	0	0	0	0	0	0
	Total	**0**	**46.3**	**5.5**	**0**	**0**	**51.8**
1911	South Peninsula	0	240.8	12.4	25.2	83.0	361.4
	North Peninsula	0	129.6	0	0	0	129.6
	Aleutians	0	9.3	0	0	0	9.3
	Total	**0**	**379.7**	**12.4**	**25.2**	**83.0**	**500.3**
1912	South Peninsula	0	334.4	27.0	40.4	195.0	596.8
	North Peninsula	0.9	252.7	11.0	0	2.4	267.0
	Aleutians	0	0	0	0	0	0
	Total	**0.9**	**587.1**	**38.0**	**40.4**	**197.4**	**863.8**
1913	South Peninsula	1.8	299.7	0	0	7.0	308.5
	North Peninsula	0.6	888.8	18.7	0	2.0	910.1
	Aleutians	0	0	0	0	0	0
	Total	**2.4**	**1,188.5**	**18.7**	**0**	**9.0**	**1,218.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1914	South Peninsula	0.6	628.9	9.9	311.0	221.1	1,171.5
	North Peninsula	8.1	1,325.1	0	0	0	1,333.2
	Aleutians	0	0	0	0	0	0
	Total	**8.7**	**1,954.0**	**9.9**	**311.0**	**221.1**	**2,504.7**
1915	South Peninsula	4.8	367.9	16.2	120.1	333.1	842.1
	North Peninsula	14.0	1,974.3	0	0	54.8	2,043.1
	Aleutians	0	0	0	0	0	0
	Total	**18.8**	**2,342.2**	**16.2**	**120.1**	**387.9**	**2,885.2**
1916	South Peninsula	6.8	730.9	34.1	576.1	508.9	1,856.8
	North Peninsula	44.2	1,974.7	0	2.6	191.4	2,212.9
	Aleutians	0	76.5	1.2	180.3	0.1	258.1
	Total	**51.0**	**2,782.1**	**35.3**	**759.0**	**700.4**	**4,327.8**
1917	South Peninsula	6.4	1,486.1	4.6	72.1	415.5	1,984.7
	North Peninsula	20.0	679.6	6.8	0.6	90.3	797.3
	Aleutians	0	70.4	3.8	0.6	23.1	97.9
	Total	**26.4**	**2,236.1**	**15.2**	**73.3**	**528.9**	**2,879.9**
1918	South Peninsula	8.7	1,014.1	16.3	2,150.0	1,501.0	4,690.9
	North Peninsula	9.7	1,208.5	0	1.2	252.3	1,471.7
	Aleutians	0	55.2	4.4	75.6	135.2	270.4
	Total	**18.4**	**2,277.8**	**20.7**	**2,227.6**	**1,888.5**	**6,433.0**
1919	South Peninsula	9.6	619.1	56.1	80.2	921.4	1,686.4
	North Peninsula	19.6	389.2	0	12.0	143.5	564.3
	Aleutians	0	3.9	0.8	4.0	0	8.7
	Total	**29.2**	**1,012.2**	**56.9**	**96.2**	**1,064.9**	**2,259.4**
1920	South Peninsula	7.8	1,142.3	47.7	2,109.8	934.0	4,241.6
	North Peninsula	19.0	1,371.9	0	0	37.0	1,427.9
	Aleutians	0	10.1	2.8	0	0	12.9
	Total	**26.8**	**2,524.3**	**50.5**	**2,109.8**	**971.0**	**5,682.4**
1921	South Peninsula	0.7	830.7	1.5	47.3	84.6	964.8
	North Peninsula	12.5	1,746.5	0	0	32.8	1,791.8
	Aleutians	0	0	0	0	0	0
	Total	**13.2**	**2,577.2**	**1.5**	**47.3**	**117.4**	**2,756.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1922	South Peninsula	6.9	3,376.8	2.2	756.7	349.3	4,491.9
	North Peninsula	10.4	667.9	0	0	42.9	721.2
	Aleutians	0	14.0	0	0	0	14.0
	Total	**17.3**	**4,058.7**	**2.2**	**756.7**	**392.2**	**5,227.1**
1923	South Peninsula	4.1	1,827.2	75.3	143.6	538.9	2,589.1
	North Peninsula	9.1	731.7	0.1	0	25.8	766.7
	Aleutians	0	0	0	0	0	0
	Total	**13.2**	**2,558.9**	**75.4**	**143.6**	**564.7**	**3,355.8**
1924	South Peninsula	3.9	1,352.0	127.3	3,931.3	1,330.7	6,745.2
	North Peninsula	10.5	701.7	0	0	48.4	760.6
	Aleutians	0	24.9	0	673.8	0.1	698.8
	Total	**14.4**	**2,078.6**	**127.3**	**4,605.1**	**1,379.2**	**8,204.6**
1925	South Peninsula	10.7	820.5	127.1	382.1	1,116.8	2,457.2
	North Peninsula	10.6	400.2	0	0	53.9	464.7
	Aleutians	0	18.6	0	3.8	9.1	31.5
	Total	**21.3**	**1,239.3**	**127.1**	**385.9**	**1,179.8**	**2,953.4**
1926	South Peninsula	9.5	3,071.5	193.8	3,719.7	1,179.8	8,174.3
	North Peninsula	23.9	672,9	0	0	71.5	768.3
	Aleutians	0	1.3	0	521.7	7.8	530.8
	Total	**33.4**	**3,745.7**	**13.8**	**4,241.4**	**1,259.1**	**9,473.4**
1927	South Peninsula	9.6	714.7	125.3	1,455.5	1,299.7	3,604.8
	North Peninsula	16.5	230.6	0.1	0	87.0	334.2
	Aleutians	0	17.3	0	334.6	0	351.9
	Total	**26.1**	**962.6**	**125.4**	**1,790.1**	**1,386.7**	**4,290.9**
1928	S.Pen & Aleutians	7.7	971.5	96.6	900.9	2,416.3	4,393.0
	North Peninsula	4.6	855.6	0	0	83.5	943.7
	Total	**12.3**	**1,827.1**	**96.6**	**900.9**	**2,499.8**	**5,336.7**
1929	S.Pen & Aleutians	10.5	935.8	84.5	1,793.5	2,429.0	5,253.3
	North Peninsula	4.1	878.0	0	0	145.2	1,027.3
	Total	**14.6**	**1,813.8**	**84.5**	**1,793.5**	**2,574.2**	**6,280.6**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1930	S.Pen & Aleutians	10.9	935.2	161.1	6,094.8	1,278.1	8,480.1
	North Peninsula	3.8	167.7	0	0	93.4	265.2
	Total	**14.7**	**1,102.9**	**161.1**	**6,094.8**	**1,371.8**	**8,745.3**
1931	S.Pen & Aleutians	11.0	1,863.2	128.7	997.9	1,216.0	4,211.8
	North Peninsula	1.3	761.0	0	0	54.9	817.2
	Total	**12.3**	**2,624.2**	**128.7**	**997.9**	**1,265.9**	**5,029.0**
1932	S.Pen & Aleutians	17.4	2,977.3	112.3	3,604.8	817.3	7,529.1
	North Peninsula	3.2	977.1	0	0	56.3	1,036.6
	Total	**20.6**	**3,954.4**	**112.3**	**3,604.8**	**873.6**	**8,565.7**
1933	S.Pen & Aleutians	12.6	1,996.7	190.0	3,109.2	1,173.9	6,482.4
	North Peninsula	1.1	350.1	0	0	16.0	367.2
	Total	**13.7**	**2,346.8**	**190.0**	**3,109.2**	**1,189.9**	**6,849.6**
1934	S.Pen & Aleutians	17.6	1,372.4	247.1	6,538.5	1,940.3	10,115.9
	North Peninsula	1.6	1,091.3	0	0.4	13.0	1,106.3
	Total	**19.2**	**2,463.7**	**247.1**	**6,538.9**	**1,953.3**	**11,222.2**
1935	S.Pen & Aleutians	13.9	978.4	117.2	5,386.2	2,003.1	8,498.8
	North Peninsula	1.0	479.2	0	0.1	33.8	514.1
	Total	**14.9**	**1,457.6**	**117.2**	**5,386.3**	**2,036.3**	**9,012.9**
1936	S.Pen & Aleutians	14.4	3,662.6	284.6	9,471.0	2,310.9	15,743.5
	North Peninsula	1.0	610.7	0	2.8	19.0	633.5
	Total	**15.4**	**4,273.3**	**284.6**	**9,473.8**	**2,329.9**	**16,377.0**
1937	S.Pen & Aleutians	9.3	1,558.0	73.9	9,302.0	1,506.7	12,449.9
	North Peninsula	1.6	860.9	0	0.1	65.6	928.2
	Total	**10.9**	**2,418.9**	**73.9**	**9,302.1**	**1,572.3**	**13,378.1**
1938	S.Pen & Aleutians	6.4	772.1	220.7	7,169.1	1,476.6	9,644.9
	North Peninsula	5.9	1,009.6	0	0	34.7	1,050.2
	Total	**12.3**	**1,781.7**	**220.7**	**7,169.1**	**1,511.3**	**10,695.1**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1939	S.Pen & Aleutians	16.5	1,881.7	98.9	6,005.3	1,440.6	9,443.0
	North Peninsula	3.9	746.2	0	0	82.2	882.3
	Total	**20.4**	**2,627.9**	**98.9**	**6,005.3**	**1,522.8**	**10,275.3**
1940	S.Pen & Aleutians	9.1	1,040.3	184.2	7,182.8	2,326.3	10,472.7
	North Peninsula	0.7	678.9	0	0	65.6	745.2
	Total	**9.8**	**1,719.2**	**184.2**	**7,182.8**	**2,391.9**	**11,487.9**
1941	S.Pen & Aleutians	13.0	1,072.0	183.0	5,347.0	1,542.0	8,157.8
	North Peninsula	0.7	491.7	0	3.2	30.2	525.8
	Total	**13.7**	**1,563.7**	**183.0**	**5,350.2**	**1,572.2**	**8,682.8**
1942	S.Pen & Aleutians	4.8	810.1	123.0	6,762.6	1,321.1	9,021.6
	North Peninsula	0	0	0	0	0	0
	Total	**4.8**	**810.1**	**123.0**	**6,762.6**	**1,321.1**	**9,021.6**
1943	S.Pen & Aleutians	21.7	2,397.7	90.6	4,360.2	924.5	7,794.7
	North Peninsula	0.2	567.4	0	1.3	50.4	619.3
	Total	**21.9**	**2,965.1**	**90.6**	**4,361.5**	**974.9**	**8,414.0**
1944	S.Pen & Aleutians	9.9	538.6	238.7	2,653.8	985.6	4,426.6
	North Peninsula	0.1	414.7	0	2.6	157.9	575.3
	Total	**10.0**	**953.3**	**238.7**	**2,656.4**	**1,143.5**	**5,001.9**
1945	S.Pen & Aleutians	21.4	813.4	116.1	3,639.6	948.9	5,539.4
	North Peninsula	0.1	394.4	0	2.5	335.1	732.1
	Total	**21.5**	**1,207.8**	**116.1**	**3,642.1**	**1,284.0**	**6,271.5**
1946	S.Pen & Aleutians	6.1	752.3	151.4	1,964.0	1,219.9	4,093.7
	North Peninsula	2.5	697.7	0.3	0	36.0	736.5
	Total	**8.6**	**1,450.0**	**151.7**	**1,964.0**	**1,255.9**	**4,830.2**
1947	S.Pen & Aleutians	3.4	1,137.1	55.8	2,319.6	1,219.2	4,735.1
	North Peninsula	0.1	357.7	0.1	0.1	75.0	433.0
	Total	**3.5**	**1,491.8**	**55.9**	**2,319.7**	**1,294.2**	**5,168.1**
1948	S.Pen & Aleutians	1.2	285.9	39.2	1,683.7	1,139.6	3,149.6
	North Peninsula	1.2	477.6	17.2	0	161.7	658.7
	Total	**3.4**	**763.5**	**56.4**	**1,683.7**	**1,301.3**	**3,808.3**

able 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1949	S.Pen & Aleutians	3.8	637.5	19.5	1,544.0	560.9	2,765.7
	North Peninsula	0.7	137.1	25.7	0	40.7	204.2
	Total	**4.5**	**774.6**	**45.2**	**1,544.0**	**601.6**	**2,969.9**
1950	S.Pen & Aleutians	4.0	1,745.3	70.7	1,613.7	562.5	3,996.2
	North Peninsula	1.1	127.8	37.8	0	217.6	284.3
	Total	**5.1**	**1,873.1**	**108.5**	**1,613.7**	**780.1**	**4,380.5**
1951	South Peninsula	1.5	264.2	55.7	2,844.8	683.1	3,849.3
	North Peninsula	1.2	358.9	32.9	20.4	203.0	616.4
	Aleutians	0	11.7	0.4	0.5	94.5	107.1
	Total	**2.7**	**634.8**	**89.0**	**2,865.7**	**980.6**	**4,572.8**
1952	South Peninsula	9.2	894.5	39.2	908.5	1,040.8	2,892.2
	North Peninsula	0.7	354.8	54.2	1.4	246.9	658.0
	Aleutians	0.2	42.8	0	31.8	25.7	100.5
	Total	**10.1**	**1,292.1**	**93.4**	**941.7**	**1,313.4**	**3,650.7**
1953	South Peninsula	7.2	1,039.2	47.9	2,743.9	1,464.6	5,302.8
	North Peninsula	0.8	537.3	26.2	18.3	224.4	807.0
	Aleutians	0	4.2	0.5	69.2	0.8	74.7
	Total	**8.0**	**1,580.7**	**74.6**	**2,831.4**	**1,689.8**	**6,184.5**
1954	South Peninsula	4.2	636.3	49.4	2,033.3	1,413.4	4,136.6
	North Peninsula	3.4	354.7	35.0	18.5	405.0	816.6
	Aleutians	0	6.3	0.8	566.5	0.2	573.8
	Total	**7.6**	**997.3**	**85.2**	**2,618.3**	**1,818.6**	**5,527.0**
1955	South Peninsula	5.4	550.1	44.8	2,529.2	688.2	3,817.7
	North Peninsula	4.1	586.6	6.2	0.9	129.6	727.4
	Aleutians	0	12.6	0.1	31.1	0.4	44.2
	Total	**9.5**	**1,149.3**	**51.1**	**2,561.2**	**818.2**	**4,589.3**
1956	South Peninsula	4.8	641.4	61.9	2,740.7	1,618.7	5,067.5
	North Peninsula	4.2	1,370.9	8.2	28.5	427.4	1,839.2
	Aleutians	0	0.4	0	33.9	0	34.3
	Total	**9.0**	**2,012.7**	**70.1**	**2,803.1**	**2,046.1**	**6,941.0**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1957	South Peninsula	5.8	341.9	49.9	913.1	1,281.4	2,592.1
	North Peninsula	1.0	327.9	18.3	3.3	274.9	625.4
	Aleutians	2.3	27.3	0.1	0.5	13.9	44.1
	Total	**9.1**	**697.1**	**68.3**	**916.9**	**1,570.2**	**3,261.6**
1958	South Peninsula	0.8	186.1	70.6	1,385.2	841.0	2,483.7
	North Peninsula	15.0	473.8	57.1	60.4	254.8	861.1
	Aleutians	0	0.3	0	613.2	3.7	617.2
	Total	**15.8**	**660.2**	**127.7**	**2,058.8**	**1,099.5**	**3,962.0**
1959	South Peninsula	0.9	217.5	8.5	915.6	711.7	1,854.2
	North Peninsula	28.7	634.9	59.1	9.6	404.7	1,137.0
	Aleutians	0	6.1	0	12.0	0.1	18.2
	Total	**29.6**	**858.5**	**67.6**	**937.2**	**1,116.5**	**3,009.4**
1960	South Peninsula	1.7	379.0	1.8	1,197.5	904.4	2,484.4
	North Peninsula	10.4	692.8	44.0	34.7	607.2	1,389.1
	Aleutians	0	7.6	0	444.9	0.3	452.8
	Total	**12.1**	**1,079.4**	**45.8**	**1,677.1**	**1,511.9**	**4,326.3**
1961	South Peninsula	0.9	456.8	10.4	1,727.8	748.6	2,944.5
	North Peninsula	6.1	387.7	24.6	3.0	153.3	574.7
	Aleutians	0	2.7	0	94.0	0.2	96.9
	Total	**7.0**	**847.2**	**35.0**	**1,824.8**	**902.1**	**3,616.1**
1962	South Peninsula	3.3	420.0	12.5	1,965.5	824.8	3,226.1
	North Peninsula	5.4	249.7	35.2	31.2	34.9	356.4
	Aleutians	0	5.5	0.1	2,001.7	1.2	2,008.5
	Total	**8.7**	**675.2**	**47.8**	**3,998.4**	**860.9**	**5,591.0**
1963	South Peninsula	1.9	204.4	16.5	2,367.7	461.3	3,051.8
	North Peninsula	3.6	225.2	40.5	6.9	49.9	326.1
	Aleutians	0	4.5	0	93.9	0.3	98.7
	Total	**5.5**	**434.1**	**57.0**	**2,468.5**	**511.5**	**3,476.6**
1964	South Peninsula	2.0	370.8	13.6	2,740.4	751.0	3,877.8
	North Peninsula	3.6	250.8	36.6	6.8	139.0	436.8
	Aleutians	0	0.2	0	194.1	2.3	196.6
	Total	**5.6**	**621.7**	**50.2**	**2,941.3**	**892.3**	**4,511.2**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1965	South Peninsula	2.1	915.7	34.2	2,884.1	556.4	4,392.5
	North Peninsula	6.1	199.5	34.5	2.1	69.7	311.9
	Aleutians	0	0	0	0	0	0
	Total	**8.2**	**1,115.2**	**68.7**	**2,886.2**	**626.1**	**4,704.4**
1966	South Peninsula	1.4	606.2	6.3	302.3	494.4	1,410.6
	North Peninsula	5.6	245.3	37.3	16.0	82.8	387.0
	Aleutians	0	1.0	0	63.5	0.7	65.2
	Total	**7.0**	**852.5**	**43.6**	**381.8**	**577.9**	**1,862.8**
1967	South Peninsula	1.6	294.1	2.9	77.8	245.2	621.6
	North Peninsula	5.5	224.7	46.8	0.7	41.3	319.0
	Aleutians	0	0.2	0	7.9	0	8.1
	Total	**7.1**	**519.0**	**49.7**	**86.4**	**286.5**	**948.7**
1968	South Peninsula	1.4	699.8	31.1	1,287.1	325.3	2,344.7
	North Peninsula	4.5	237.1	64.9	0.2	73.5	380.2
	Aleutians	0	2.0	0.1	902.8	0.8	905.7
	Total	**5.9**	**938.9**	**96.1**	**2,190.1**	**399.6**	**3,630.6**
1969	South Peninsula	1.9	912.8	10.9	1,219.4	389.2	2,534.2
	North Peninsula	4.8	321.3	49.1	0.1	28.1	403.4
	Aleutians	0	1.9	0	242.2	1.5	245.6
	Total	**6.7**	**1,236.0**	**60.0**	**1,461.7**	**418.8**	**3,183.2**
1970	South Peninsula	1.8	1,794.6	32.2	1,723.4	981.7	4,533.7
	North Peninsula	3.2	213.0	26.4	7.8	50.2	300.6
	Aleutians	0	0.2	0.1	672.5	3.3	676.1
	Total	**5.0**	**2,007.8**	**58.7**	**2,403.7**	**1,035.2**	**5,510.4**
1971	South Peninsula	2.2	715.5	16.8	1,450.1	1,366.6	3,551.2
	North Peninsula	2.2	354.2	8.2	0.3	64.2	429.1
	Aleutians	0	0.3	0	45.5	0.1	45.9
	Total	**4.4**	**1,070.0**	**25.0**	**1,495.9**	**1,430.9**	**4,026.2**
1972	South Peninsula	1.3	557.8	8.0	78.0	727.5	1,372.6
	North Peninsula	1.8	179.5	9.6	0	84.7	275.6
	Aleutians	0	0.1	0	2.8	0	2.9
	Total	**3.1**	**737.4**	**17.6**	**80.8**	**812.2**	**1,651.1**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1973	South Peninsula	0.4	330.2	6.6	58.0	293.0	688.2
	North Peninsula	4.4	171.8	26.9	0.3	155.7	359.1
	Aleutians	0	0.1	0	7.0	0	7.1
	Total	**4.8**	**502.1**	**33.5**	**65.3**	**448.7**	**1,054.4**
1974	South Peninsula	0.5	204.7	9.4	99.7	71.5	385.8
	North Peninsula	5.1	247.9	24.0	10.5	35.3	322.8
	Aleutians	0	0	0	0	0	0
	Total	**5.6**	**452.6**	**33.4**	**110.2**	**106.8**	**708.6**
1975	South Peninsula	0.1	268.4	0	61.7	132.9	463.1
	North Peninsula	2.1	233.5	28.2	0.3	8.7	272.8
	Aleutians	0	0	0	0	0	0
	Total	**2.2**	**501.9**	**28.2**	**62.0**	**141.6**	**735.9**
1976	South Peninsula	2.1	375.0	0.2	2,367.0	532.5	3,276.8
	North Peninsula	4.9	641.1	26.0	0.6	73.6	746.2
	Aleutians	0	0	0	0	0	0
	Total	**7.0**	**1,016.1**	**26.2**	**2,367.6**	**606.1**	**4,023.0**
1977	South Peninsula	0.5	311.7	2.1	1,448.6	243.2	2,006.1
	North Peninsula	5.5	471.1	34.1	0.9	129.1	640.7
	Aleutians	0	0	0	0	0	0
	Total	**6.0**	**782.8**	**36.2**	**1,449.5**	**372.3**	**2,646.8**
1978	South Peninsula	0.8	579.5	60.7	5,608.8	547.0	6,796.8
	North Peninsula	14.2	896.2	63.3	466.6	163.2	1,603.5
	Aleutians	0	1.8	0	38.1	0	39.9
	Total	**15.0**	**1,477.5**	**124.0**	**6,113.5**	**710.2**	**8,440.2**
1979	South Peninsula	2.1	1,149.7	356.5	6,570.5	483.0	8,561.8
	North Peninsula	17.1	1,979.5	112.8	5.0	65.7	2,180.1
	Aleutians	0	12.2	0	539.4	0.2	551.8
	Total	**19.2**	**3,141.4**	**469.3**	**7,114.9**	**548.9**	**11,293.7**
1980	South Peninsula	4.8	3,613.0	274.2	7,961.5	1,351.2	13,104.7
	North Peninsula	16.8	1,397.1	127.9	301.7	700.2	2,543.7
	Aleutians	0	9.2	0	2,597.5	4.9	2,611.6
	Total	**21.6**	**5,019.3**	**402.1**	**10,760.7**	**2,056.3**	**18,260.0**

Table 1. (Continued)

YEAR		KINGS	SOCKEYES	COHOS	PINKS	CHUMS	TOTAL
1981	South Peninsula	10.2	2,255.2	162.2	5,035.9	1,770.3	9,233.8
	North Peninsula	18.3	1,844.9	155.4	11.2	706.8	2,736.6
	Aleutians	0	5.4	0.2	302.8	6.6	315.0
	Total	**28.5**	**4,105.5**	**317.8**	**5,349.9**	**2,483.7**	**12,285.4**
1982	South Peninsula	9.8	2,346.0	256.0	6,734.9	2,272.5	11,619.2
	North Peninsula	30.1	1,435.3	238.0	12.3	331.1	2,046.8
	Aleutians	0	2.7	0	1,447.8	6.1	1,456.6
	Total	**39.9**	**3,784.0**	**494.0**	**8,195.0**	**2,609.7**	**15,122.6**
1983	South Peninsula	26.9	2,556.6	127.7	2,827.6	1,707.1	7,245.9
	North Peninsula	29.5	2,093.4	75.1	3.4	348.7	2,550.1
	Aleutians	0	4.4	0	2.0	11.4	17.8
	Total	**56.4**	**4,654.4**	**202.8**	**2,833.0**	**2,067.2**	**9,813.8**
1984	South Peninsula	9.2	2,318.0	309.1	11,589.3	1,656.5	15,882.1
	North Peninsula	23.0	1,734.9	198.6	27.4	796.7	2,780.6
	Aleutians	0	67.2	0	2,309.7	33.9	2,410.8
	Total	**32.2**	**4,120.1**	**507.7**	**13,926.4**	**2,487.1**	**21,073.5**
1985	South Peninsula	7.9	2,214.6	172.5	4,433.7	1,393.1	8,221.8
	North Peninsula	23.5	2,600.5	167.8	3.1	671.1	3,466.0
	Aleutians	0	2.8	0	0.1	14.2	17.1
	Total	**31.4**	**4,817.9**	**340.3**	**4,436.9**	**2,078.4**	**11,704.9**
1986	South Peninsula	5.6	1,223.0	235.9	4,031.5	1,749.7	7,245.7
	North Peninsula	11.7	2,436.7	164.1	22.6	271.2	2,933.3
	Aleutians	0	7.7	0.1	42.6	38.8	89.2
	Total	**17.3**	**3,694.4**	**400.1**	**4,096.7**	**2,059.7**	**10,268.2**
1987	South Peninsula	9.2	1,449.8	224.7	1,208.6	1,376.3	4,268.6
	North Peninsula	14.2	1,209.4	171.8	3.5	368.7	1,767.6
	Aleutians	0	0.1	0	0	0	0.1
	Total	**23.4**	**2,659.3**	**396.5**	**1,212.1**	**1,745.0**	**6,036.3**
1988	South Peninsula	11.1	1,472.9	505.5	7,044.8	1,905.2	10,939.5
	North Peninsula	16.8	1,528.1	234.0	65.2	393.5	2,237.6
	Aleutians	0	4.3	0	183.1	0.5	187.9
	Total	**27.9**	**3,005.3**	**739.5**	**7,293.1**	**2,299.2**	**13,365.0**

Table 2. 1988 ALASKA PENINSULA - ALEUTIAN ISLANDS SALMON CATCH BY STATISTICAL AREA, SECTION, AND DISTRICT (Figures in Fish)

SOUTH PENINSULA

Southeastern District

Area	Location	Kings	Sockeyes	Cohos	Pinks	Chums	Total
281-35	East Stepovak Section	121	57,073	31,302	452,554	61,354	602,404
281-33	Stepovak Flats Section	132	6,899	15	42,363	112,240	161,649
281-32	Grub Gulch/Clark Bay	20	17,283	52	20,340	9,148	46,843
281-31	Orzinski & American Bays	8	14,462	100	2,393	803	17,766
281-20	Chichagof Bay/West Cove	31	27,753	101	306,176	15,909	349,970
Total Northwest Stepovak Section		59	59,498	253	328,909	25,860	414,579
283-90	Southwest Stepovak Section	3	10,139	1,220	71,439	10,572	93,373
283-80	Balboa Bay Section	30	20,559	7,723	267,719	44,612	340,643
283-75	Beaver Bay Section	4	4,206	108	17,823	4,194	26,335
282-11	Popof, Korovin, S. Unga	6,786	535,019	320,494	2,423,706	365,543	3,651,548
282-12	Zachary Bay	164	5,405	1,436	161,141	17,163	185,309
282-13	Bay Point	3	1,729	0	4,774	784	7,290
282-14	W. Unga Island	377	113,566	16,567	563,096	61,597	755,203
282-21	C. Wedge, Northeast Bight	9	984	0	17	1,128	2,138
282-22	Mountain Pt./W. Nagai	548	41,420	12,850	335,541	30,367	420,726
282-24	C. Thompson	4	260	15	1,600	214	2,093
Total Shumagin Islands Section		7,891	698,383	351,362	3,489,875	476,796	5,024,307
SOUTHEASTERN DISTRICT TOTAL		8,240	856,757	391,983	4,670,682	735,628	6,663,290

South Central District

283-62	Mino Cr.-Little Coal B. Sect.	5	3,071	67	18,249	4,198	25,590
283-63	East Pavlof Bay	7	3,535	36	57,057	7,667	68,302
283-65	Chinaman Lagoon	0	110	1,960	6,575	19,964	28,609
283-61	Long Beach	254	41,386	1,591	24,103	56,777	124,111
Total Pavlof Bay Section		261	45,031	3,587	87,735	84,408	221,022
283-64	Canoe Bay Section	16	866	42	17,359	63,943	82,226
SOUTH CENTRAL DISTRICT TOTAL		282	48,968	3,696	123,343	152,549	328,838

.e (Continued)

SOUTH PENINSULA (continued)

outhwestern District

Area	Location	Kings	Sockeyes	Cohos	Pinks	Chums	Total
283-52	Volcano Bay	37	2,687	7,290	152,266	146,474	308,754
283-51	Dolgoi Island	76	11,648	6,329	44,194	22,136	84,383
Total Volcano Bay Section		113	14,335	13,619	196,460	168,610	393,137
283-42	Belkofski Bay	5	147	50	299,034	32,416	331,652
283-33	King Cove	1	156	40	291,248	28,832	320,277
Total Belkofski Bay Section		6	303	90	590,282	61,248	651,929
283-31	**Deer Island Section**	0	434	198	1,041,924	2,594	1,045,150
283-32	Outer Cold Bay	0	335	0	0	4,609	4,944
283-34	Inner Cold Bay	1	522	24	26,659	160,652	187,858
283-35	Lenard Harbor	0	0	0	5,775	1,622	7,397
Total Cold Bay Section		1	857	24	32,434	166,883	200,199
283-20	**Thin Point Section**	4	3,574	10,436	46,534	10,446	70,994
283-12	**Morzhovoi Section**	8	2,211	904	11,622	9,057	23,842
284-60	**Ikatan Bay Section**	392	120,304	59,709	187,633	95,396	463,434
SOUTHWESTERN DISTRICT TOTAL		524	142,018	84,980	2,106,929	514,234	2,848,685

Unimak District

284-10	**Sanak Island Section**	3	611	0	261	707	1,582
284-50	Bird Island	266	110,789	17,771	42,689	138,368	309,883
284-40	Cape Lazaref	275	95,879	7,081	38,340	137,147	278,722
Total Otter Cove Section		541	206,668	24,852	81,029	275,515	588,605
284-20	**Cape Lutke Section**	1,482	217,850	22	62,573	226,587	508,514
Unimak District Total		2,026	425,129	24,874	143,863	502,809	1,098,701
TOTAL SOUTH PENINSULA		11,072	1,472,872	505,533	7,044,817	1,905,220	10,939,514

Table 2. (Continued)

ALEUTIAN ISLANDS AREA

Unalaska District

Area	Location	Kings	Sockeyes	Cohos	Pinks	Chums	Total
302-31	Unalaska Bay Section	0	0	0	183,101	0	183,101
302-24	Makushin Bay Section	0	0	7	0	0	7
302-22	Kashega Bay Section	0	4,315	0	8	450	4,773
UNALASKA DISTRICT TOTAL		0	4,315	7	183,109	450	187,881
TOTAL ALEUTIAN ISLANDS AREA		0	4,315	7	183,109	450	187,881

NORTH PENINSULA

Northwestern District

311-32	Urilia Bay Section	23	40,744	4,777	3	6,758	52,305
311-52	Swanson Lagoon Section	3	24,766	12,303	181	15,715	52,968
311-60	Bechevin Bay Section	4	1,473	71	28,819	43,640	74,007
312-10	Outside Izembek	0	375	1	1	2,499	2,876
312-20	Izembek Lagoon	0	2,886	0	10	9,795	12,691
312-40	Moffet Bay	4	8,207	3,037	1,141	99,878	112,267
Total Izembek-Moffet Bay Section		4	11,468	3,038	1,152	112,172	127,834
NORTHWESTERN DISTRICT TOTAL		34	78,451	20,189	30,155	178,285	307,114

Northern District

313-30	Nelson Lagoon Section	6,474	186,624	95,424	803	12,634	301,959
314-20	Herendeen Bay	3	84	0	4	61,743	61,834
314-30	Port Moller Bay	48	0	0	0	0	48
314-12	Port Moller Bight	160	3,766	0	0	14,078	18,004
Total Herendeen-Moller Bay Section		211	3,850	0	4	75,821	79,886

Table 2. (Continued)

NORTH PENINSULA (continued)

Northern District (continued)

Area	Location	Kings	Sockeyes	Cohos	Pinks	Chums	Total
315-11	Bear and Sandy Rivers	3,373	444,016	14,464	28,336	66,878	557,067
315-20	Muddy River	91	50,936	1,225	2,688	6,820	61,760
Total Bear River Section		**3,464**	**494,952**	**15,689**	**31,024**	**73,698**	**618,827**
316-10	**Three Hills Section**	**487**	**258,982**	**3,297**	**372**	**20,176**	**283,314**
316-20	Outside Ilnik	52	85,746	11,524	1,887	6,160	105,369
316-22	Ilnik Lagoon	26	7,602	16,493	141	483	24,745
316-25	Strogonof Point	240	401,268	6,954	666	21,412	430,540
Total Ilnik Section		**318**	**494,616**	**34,971**	**2,694**	**28,055**	**560,654**
317-10	**Outer Port Heiden Section**	**0**	**647**	**8,627**	**181**	**11**	**9,466**
317-20	**Inner Port Heiden Section**	**5,816**	**9,951**	**27,297**	**1**	**4,800**	**47,865**
318-20	**Cinder River Section**	**1**	**43**	**28,472**	**8**	**0**	**28,524**
NORTHERN DISTRICT TOTAL		**16,771**	**1,449,665**	**213,777**	**35,087**	**215,195**	**1,930,495**
TOTAL NORTH PENINSULA		**16,805**	**1,528,116**	**233,966**	**65,242**	**393,480**	**2,237,609**
TOTAL ALASKA PENINSULA-ALEUTIAN ISLANDS AREAS		**27,877**	**3,005,303**	**739,506**	**7,293,168**	**2,299,150**	**13,365,004**

Table 3. ESTIMATED VALUE OF 1988 COMMERCIAL SALMON FISHERY

SALMON EX-VESSEL

South Peninsula	King	Sockeye	Coho	Pink	Chum	Total
Poundage	184,920	8,893,619	3,608,672	25,125,831	14,256,186	52,069,228
Average Weight	16.7	6.0	7.1	3.6	7.5	
Value $$$	265,000	21,080,000	4,114,000	19,804,000	11,939,000	57,202,000
Aleutian Islands						
Poundage	0	23,760	62	585,725	3,370	612,917
Average Weight	-	5.5	8.9	3.2	7.5	
Value $$$	0	53,000	-	351,000	3,000	407,000
Northwestern District						
Poundage	761	466,911	173,588	104,789	1,439,130	2,185,179
Average Weight	22.4	6.0	8.6	3.5	8.1	
Value $$$	1,000	1,097,000	208,000	84,000	1,180,000	2,570,000
Northern District						
Poundage	290,501	8,725,849	1,773,056	112,464	1,563,114	12,464,984
Average Weight	17.3	6.0	8.3	3.2	7.3	
Value $$$	407,000	20,506,000	2,128,000	90,000	1,282,000	24,413,000
North Peninsula Total						
Poundage	291,262	9,192,760	1,946,644	217,253	3,002,244	14,650,163
Average Weight	17.3	6.0	8.3	3.3	7.6	
Value $$$	408,000	21,603,000	2,336,000	174,000	2,462,000	26,983,000
Total Alaska Peninsula - Aleutian Islands Areas						
Poundage	476,182	18,110,139	5,555,378	25,928,809	17,261,800	67,332,308
Average Weight	17.1	6.0	7.5	3.6	7.5	
Value $$$	673,000	42,736,000	6,450,000	20,329,000	14,404,000	84,592,000
South Unimak and Shumagin Islands June Fishery (These figures are included above.)						
Poundage	75,848	4,086,405	52	494,653	3,720,667	8,377,625
Average Weight	18.7	5.4	4.7	2.3	7.1	
Value $$$	121,000	10,216,000	-	99,000	3,721,000	14,157,000

Table 3. (continued)

SALMON FIRST WHOLESALE

	Kings	Sockeye	Cohos	Pinks	Chums	Total
Fish	$1,600,000	77,700,000	20,600,000	55,600,000	35,700,000	191,200,000
Roe	100,000	8,700,000	1,100,000	6,400,000	5,700,000	22,000,000
Total	$1,700,000	86,400,000	21,700,000	62,000,000	41,400,000	213,200,000

HERRING

	Ex-Vessel	Wholesale
South Peninsula Food/Bait	$ 0	0
South Peninsula Sac-Roe	324,000	1,200,000
North Peninsula Sac-Roe	235,000	900,000
Eastern Aleutians Food/Bait	505,000	1,800,000
Total	$1,064,000	3,900,000

Values are obtained by selecting a price that approximates an average and multiplying the price by the number of pounds. Because prices fluctuate throughout the year and between buyers and sections, the values listed are estimates.

Table 4. 1988 SALMON CATCHES (NUMBERS OF FISH) BY SPECIES, WEEK, AND AREA (All Gear)

281 - STEPOVAK

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
28 7/06-09	21	17,924	3	67	972
29 7/10-16	97	20,256	21	336	6,141
30 7/17-23	60	22,710	147	49,571	28,327
31 7/24-30	77	29,520	4,685	83,496	70,872
32 7/31-8/06	45	16,637	5,928	452,665	82,426
33 8/07-13	12	3,626	13,840	236,296	9,114
36 9/01-03	0	1,598	491	1,064	355
37 9/04-10	0	7,436	3,043	321	756
38 9/11-17	0	3,563	3,352	10	491
40 9/25-30	0	200	60	0	0
Total	312	123,470	31,570	823,826	199,454

283-80 and 90 - RENSHAW POINT TO POINT ALIAKSIN

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
31 7/24-30	9	14,538	1,682	47,165	14,859
32 7/31-8/06	16	8,823	2,003	182,806	33,021
33 8/07-13	5	1,540	831	108,756	7,205
36 9/01-03	0	173	43	56	9
37 9/04-10	1	3,331	3,758	368	74
38 9/11-17	2	1,723	528	6	7
39 9/18-24	0	318	67	1	9
40 9/25-30	0	252	31	0	0
Total	33	30,698	8,943	339,158	55,184

Table 4. (Continued)

282 - SHUMAGIN ISLANDS

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/11	46	7,871	0	0	746
25 6/12-18	462	98,889	0	26,788	20,047
26 6/19-25	901	140,947	2	57,243	32,211
27 6/27	530	34,663	2,429	47,667	11,700
28 7/06-09	1,664	50,002	623	15,345	41,808
29 7/10-16	1,125	88,330	5,450	15,788	48,580
30 7/17-23	1,380	120,154	95,969	240,373	114,570
31 7/24-30	681	61,705	93,435	391,903	74,223
32 7/31-8/06	353	39,057	65,935	999,478	75,802
33 8/07-13	442	23,377	46,310	921,567	39,439
34 8/14-20	309	28,117	37,093	712,064	17,610
36 9/01-03	0	730	475	58,746	306
37 9/04-10	1	3,111	2,521	2,820	101
38 9/11-17	0	1,784	1,064	95	106
39 9/18-24	0	208	33	1	4
40 9/25-30	0	177	21	1	1
42 10/09-15	0	25	2	0	0
Total	7,894	699,147	351,362	3,489,878	477,254

POINT ALIAKSIN TO BLACK POINT

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
28 7/03-09	8	3,807	25	0	12,960
29 7/10-16	2	603	0	49	11,190
30 7/17-23	9	2,910	100	4,900	40,243
31 7/24-30	11	2,261	0	8,680	13,339
32 7/31-8/06	2	2,179	108	35,511	7,138
33 8/07-13	0	21	9	27,862	13,400
34 8/14-20	0	7	12	40,065	4,525
37 9/04-10	0	0	1,959	0	0
Total	32	11,788	2,213	117,067	102,795

Table 4. (Continued)

BLACK POINT TO WODAPOINI POINT (INCLUDING DEER ISLAND)

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
28 7/06-09	7	3,383	34	82	595
29 7/10-16	51	21,698	99	102	4,720
30 7/17-23	115	16,031	3,266	2,907	15,438
31 7/24-30	168	13,678	4,879	14,946	24,174
32 7/31-8/06	7	463	328	356,753	92,056
33 8/07-13	3	870	6,308	815,815	104,996
34 8/14-20	22	333	458	520,242	27,058
35 8/21-27	0	2	13	141,722	2,922
36 9/01-03	0	0	39	200	4,949
37 9/04-10	0	0	74	0	12,321
Total	373	56,458	15,498	1,852,769	289,229

COLD BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
28 7/06-09	0	30	0	0	0
30 7/17-23	0	650	0	1,353	9,463
31 7/24-30	0	58	0	3,004	15,292
32 7/31-8/06	1	42	3	3,740	40,492
33 8/07-13	0	49	1	16,556	95,883
34 8/14-20	0	28	9	7,781	5,144
35 9/01-03	0	0	11	0	0
Total	1	857	24	32,434	166,883

Table 4. (Continued)

THIN POINT SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
32 7/31-8/06	0	0	0	1,442	2,964
33 8/07-13	0	277	58	30,268	4,149
34 8/14-20	4	2,917	1,368	14,601	3,281
35 8/21-27	0	227	620	223	52
36 9/01-03	0	0	2,760	0	0
37 9/04-10	0	152	2,574	0	0
38 9/11-17	0	0	2,381	0	0
40 9/25-30	0	1	675	0	0
Total	4	3,500	10,436	46,534	10,446

MORZHOVOI BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
29 7/10-16	0	364	6	12	152
30 7/17-23	4	888	275	248	1,178
31 7/24-30		487	203	372	1,552
32 7/31-8/06	4	472	120	11,030	7,553
38 9/11-17	0	0	300	0	0
Total	8	2,211	904	11,662	9,057

Table 4. (Continued)

KENMORE HEAD TO SCOTCH CAP (INCLUDING SANAK ISLAND)

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/11	82	11,544	0	26	18,842
25 6/12-18	461	181,017	8	14,388	155,771
26 6/19-25	1,322	234,094	0	61,024	202,987
27 6/27	260	47,802	3	11,240	87,525
28 7/03-09	124	20,959	824	5,064	57,590
29 7/10-16	22	5,843	956	376	2,600
30 7/17-23	31	13,722	21,286	6,781	10,917
31 7/24-30	81	18,528	41,712	45,358	33,251
32 7/31-8/06	19	8,231	12,948	81,440	17,807
33 8/07-13	8	2,110	4,459	75,726	7,590
34 8/14-20	8	1,580	2,127	30,072	3,644
37 9/04-10	0	0	178	0	29
38 9/11-17	0	3	82	1	12
Total	2,418	545,433	84,583	331,496	598,205

UNALASKA ISLAND

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
29 7/10-16	0	1,600	0	0	0
30 7/17-23	0	115	0	0	0
31 7/24-30	0	2,600	0	5,008	450
33 8/07-13	0	0	0	11,904	0
34 8/13-20	0	0	0	126,354	0
35 8/21-27	0	0	0	39,843	0
38 9/11-17	0	0	7	0	0
Total	0	4,315	7	183,109	450

Table 4. (Continued)

URILIA BAY

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
24 6/05-11	2	2,849	0	0	39
25 6/12-18	5	9,216	0	3	434
26 6/19-25	9	8,634	0	0	2,744
27 6/26-7/02	5	20,030	0	0	3,541
36 9/01-03	0	0	250	0	0
37 9/04-10	2	15	4,527	0	0
Total	23	40,744	4,777	3	6,758

311-52 and 60 SWANSON LAGOON AND BECHEVIN BAY

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
25 6/12-18	0	6	0	0	1,422
26 6/19-25	0	118	0	0	2,798
27 6/26-7/02	0	275	0	0	635
28 7/03-09	0	690	1	11	10,851
29 7/10-16	3	1,284	0	0	9,605
30 7/17-23	0	30	0	99	1,987
31 7/24-30	0	20	0	205	4,425
32 7/31-8/06	4	16,805	2	9,869	9,648
33 8/07-13	0	3,587	25	10,738	6,644
34 8/14-20	0	10	2	8,078	5,482
36 9/01-03	0	2,962	8,202	0	212
37 9/04-10	0	452	4,142	0	4,883
38 9/11-17	0	0	0	0	763
Total	7	26,239	12,374	29,028	59,355

Table 4. (Continued)

312 - IZEMBEK-MOFFET BAY SECTION

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
26 6/19-25	0	60	0	0	760
27 6/26-7/02	0	55	0	0	4,513
28 7/03-09	0	1,949	0	0	27,222
29 7/10-16	0	1,113	0	0	7,565
30 7/17-23	2	2,314	1	162	28,840
31 7/24-30	1	3,499	0	610	22,682
32 7/31-8/06	1	2,078	1	380	18,020
33 8/07-13	0	400	0	0	700
37 9/04-10	0	0	3,036	0	1,870
Total	4	11,468	3,038	1,152	112,172

313-30 - NELSON LAGOON

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 5/29-6/04	7	8	0	0	0
24 6/05-11	526	1,346	0	0	0
25 6/12-18	772	3,947	0	0	0
26 6/19-25	2,425	23,668	0	0	0
27 6/26-7/02	2,288	52,348	0	0	52
28 7/03-09	339	44,802	0	0	0
29 7/10-16	78	20,104	0	0	88
30 7/17-23	20	16,495	0	1	1,576
31 7/24-30	4	9,538	1	36	4,076
32 7/31-8/06	3	5,361	552	57	2,947
33 8/07-13	7	4,923	3,638	347	2,176
34 8/14-20	1	2,807	8,818	283	1,272
35 8/21-27	1	993	25,770	59	372
36 8/28-9/03	3	243	28,727	15	61
37 9/04-10	0	41	22,995	5	14
38 9/11-17	0	0	4,923	0	0
Total	6,474	186,624	95,424	803	12,634

Table 4. (Continued)

314-20 - HERENDEEN BAY

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
27 6/26-7/02	2	24	0	0	5,168
28 7/03-09	1	6	0	2	20,647
29 7/10-16	0	2	0	2	9,860
30 7/17-20	0	52	0	0	26,068
Total	3	84	0	4	61,743

PORT MOLLER TO CAPE SENIAVIN

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
22 5/22-28	26	0	0	0	0
23 5/29-6/04	115	42	0	0	42
24 6/05-11	691	649	0	0	426
25 6/12-18	975	5,829	0	0	228
26 6/19-25	761	56,048	0	0	8,409
27 6/26-7/02	709	81,889	1	0	27,071
28 7/03-09	219	61,292	0	0	9,537
29 7/10-16	56	20,425	0	2	3,501
30 7/17-23	44	34,474	5	73	12,920
31 7/24-30	29	27,480	15	1,568	9,735
32 7/31-8/06	13	35,077	241	7,810	7,766
33 8/07-13	17	54,311	939	14,669	5,102
34 8/14-20	9	33,632	1,327	4,453	1,912
35 8/21-27	6	58,542	5,674	1,874	870
36 8/28-9/03	2	25,946	5,815	540	245
37 9/04-10	0	3,082	1,672	35	12
Total	3,672	498,718	15,689	31,024	87,776

Table 4. (Continued)

316 - THREE HILLS AND ILNIK SECTIONS

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 5/29-6/04	0	51	0	0	0
24 6/05-11	2	263	0	0	0
25 6/12-18	8	826	0	0	0
26 6/19-25	18	2,540	0	0	25
27 6/26-7/02	277	102,115	1	0	5,759
28 7/03-09	283	396,246	0	2	22,699
29 7/10-16	135	184,511	3	14	10,713
30 7/17-23	52	35,224	5	8	4,883
31 7/24-30	16	10,695	40	10	2,532
32 7/31-8/06	10	9,227	3,320	330	795
33 8/07-13	2	2,618	2,248	1,299	298
34 8/14-20	1	2,762	4,430	628	99
35 8/21-27	1	4,332	12,309	591	25
36 8/28-9/03	0	1,772	8,337	168	0
37 9/04-10	0	416	6,026	16	0
38 9/11-17	0	0	1,549	0	0
Total	805	753,598	38,268	3,066	47,828

INNER AND OUTER PORT HEIDEN SECTIONS

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
23 5/29-6/04	42	0	0	0	0
24 6/05-11	1,378	75	2	0	41
25 6/12-18	1,894	571	0	0	10
26 6/19-25	2,284	2,843	40	0	1,118
27 6/26-7/02	142	3,721	0	1	2,098
28 7/03-09	57	1,310	0	0	1,139
29 7/10-16	16	1,003	0	0	157
30 7/17-23	1	209	0	0	212
33 8/07-13	0	106	348	0	25
34 8/14-20	2	51	5,429	0	0
35 8/21-27	0	244	12,951	181	9
36 8/28-9/03	0	259	10,503	0	0
37 9/04-10	0	206	6,471	0	2
38 9/11-17	0	0	180	0	0
Total	5,816	10,598	35,924	182	4,811

Table 4. (Continued)

318 - CINDER RIVER

Week*	Kings	Sockeyes	Cohos	Pinks	Chums
32 7/31-8/06	0	0	195	0	0
33 8/07-13	0	0	1,205	0	0
34 8/14-20	1	2	7,419	0	0
35 8/21-27	0	20	13,508	8	0
36 8/28-9/03	0	21	5,154	0	0
37 9/04-10	0	0	877	0	0
38 9/11-17	0	0	114	0	0
Total	1	43	28,472	8	0

*The weeks listed here do not necessarily include the entire statistical week. Complete statistical weeks are listed in the back of this report.

Table 5. 1988 Salmon Catches in Numbers of Fish By Gear

SOUTHEASTERN AND SOUTH CENTRAL DISTRICTS

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	8,042	600,953	374,348	4,529,264	806,604	6,319,211
Set Gillnet	480	304,772	21,331	264,761	81,573	672,917
Total	8,522	905,725	395,679	4,794,025	888,177	6,992,128

SOUTHWESTERN AND UNIMAK DISTRICTS

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	1,527	167,751	15,692	2,078,652	626,822	2,890,444
Drift Gillnet	902	362,409	75,382	145,015	373,814	957,522
Set Gillnet	121	36,987	18,780	27,125	16,407	99,420
Total	2,550	567,147	109,854	2,250,792	1,017,043	3,947,386

SOUTH PENINSULA TOTAL

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	9,569	768,704	390,040	6,607,916	1,433,426	9,209,655
Drift Gillnet	902	362,409	75,382	145,015	373,814	957,522
Set Gillnet	601	341,759	40,111	291,886	97,980	772,337
Total	11,072	1,472,872	505,533	7,044,817	1,905,220	10,939,514

ALEUTIAN ISLANDS AREA

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	0	4,315	7	183,109	450	187,881
Total	0	4,315	7	183,109	450	187,881

Table 5. (continued)

NORTHWESTERN DISTRICT

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	12	55,878	15,196	27,545	166,809	265,440
Drift Gillnet	18	7,262	2,101	2,105	8,941	20,427
Set Gillnet	4	15,311	2,892	505	2,535	21,247
Total	34	78,451	20,189	30,155	178,285	307,114

NORTHERN DISTRICT

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	59	11,614	0	4	59,844	71,521
Drift Gillnet	11,404	1,283,156	122,324	34,396	130,243	1,581,523
Set Gillnet	5,308	154,895	91,453	687	25,108	277,451
Total	16,771	1,449,665	213,777	35,087	215,195	1,930,495

NORTH PENINSULA TOTAL

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	71	67,492	15,196	27,549	226,653	336,961
Drift Gillnet	11,422	1,290,418	124,425	36,501	139,184	1,601,950
Set Gillnet	5,312	170,206	94,345	1,192	27,643	298,698
Total	16,805	1,528,116	233,966	65,242	393,480	2,237,609

ALASKA PENINSULA - ALEUTIAN ISLANDS AREA TOTAL

	Kings	Sockeyes	Cohos	Pinks	Chums	Total
Seine	9,640	840,511	405,243	6,818,574	1,660,529	9,734,497
Drift Gillnet	12,324	1,652,827	199,807	181,516	512,998	2,559,472
Set Gillnet	5,913	511,965	134,456	293,078	125,623	1,071,035
Total	27,877	3,005,303	739,506	7,293,168	2,299,150	13,365,004

Table 6. 1988 SOUTHEAST DISTRICT MAINLAND FISHERY ESTIMATED INTERCEPTION OF CHIGNIK DESTINED SOCKEYE

Time Period*	Fish	Percent	Subtotal**
July 11 - 23	5,378	(7)	5,378
July 24 - 25	13,942	(18)	19,320
July 26 - August 13	46,322	(58)	65,642
September 3 - 30	13,458	(17)	79,100

* Fishing is not allowed every day of period. Figures include sockeye taken in statistical area 281-33 when chums were target species during July.

**Figures represent 80% of total sockeye taken. The other 20% are not considered to be Chignik Bound.

Purse Seiners	25,934	(32.8%)
Set Gillnetters	53,166	(67.2%)
	79,100	

Total Suzy Creek to Dent Point catch 59,498. Sockeye taken in this area are considered to be local Orzinski Lake fish and are not included in the figures above.

Table 7. CHIGNIK SOCKEYE RUN CATCHES[1] 1964 - 1988 (Numbers of Fish in Thousands)

	Chignik Area		Cape Igvak		Balboa-Stepovak[8]		
	Catch	%	Catch	%	Catch	%	Total Catch
1964[2]	561	90.63	15	2.42	43	6.95	619
1965[2]	635	90.46	11	1.57	56	7.98	702
1966[2]	225	88.24	18	7.06	12	4.71	255
1967[2]	473	91.67	23	4.46	20	3.88	516
1968[2]	878	80.92	136	12.53	71	6.54	1,085
1969[2]	310	74.70	98	23.61	7	1.69	415
1970[2]	1,426	70.04	542	26.62	68	3.34	2,036
1971[2]	1,016	76.97	253	19.17	51	3.86	1,320
1972[2]	379	86.33	42	9.57	18	4.10	439
1964-72 catch and percentage figures are total for the entire season. Catch figures and percentages after 1972 are only through July 25.							
1973[3]	768	89.41	53	6.17	38	4.42	859
1974[3]	517	73.12	122	17.26	68	9.62	707
1975[3]	115	81.56	24	17.02	2	1.42	141
1976[3]	760	82.25	118	12.77	46	4.98	924
1977[3]	1,543	90.39	129	7.56	35	2.05	1,707
1978[4/5]	1,452	85.36	227	13.35	22	1.29	1,701
1979[4/6]	799	91.11	15	1.71	63	7.18	877
1980[4/6]	662	91.31	1	0.14	62	8.55	725
1981[4/6]	1,605	79.97	284	14.15	118	5.88	2,007
1982[4/6]	1,251	83.90	172	11.54	68	4.56	1,491
1983[4/6]	1,451	73.06	318	16.01	217	10.93	1,986
1984[4/6]	2,476	74.47	464	13.95	385	11.58	3,325
1985[4/7]	692	79.72	125	14.40	51	5.88	868
1986[4/7]	1,456	82.63	188	10.67	118	6.70	1,762
1987[4/7]	1,660	78.01	322	15.08	147	6.91	2,128
1988[4/7]	675	95.74	11	1.56	19	2.70	705

Footnotes are listed on following page.

Table 7. (Continued) CHIGNIK SOCKEYE RUN CATCH FOOTNOTES

1/ The Cape Igvak and Balboa-Stepovak figures represent 80% of the total sockeye catches for those areas as it is estimated that roughly 80% of the sockeye caught in the Cape Igvak section and Balboa-Stepovak are destined for Chignik.

2/ Prior to 1973, Cape Igvak and Balboa-Stepovak fisheries were regulated by set weekly fishing periods in the regulation book, usually 5 days per week. The situation was sometimes modified due to poor escapements at Chignik.

3/ During 1973 through 1977 all three fisheries were managed on a day for day basis.

4/ Beginning with the 1978 season, the current Cape Igvak Fishery Management Plan still in effect today was implemented. The Cape Igvak fishery was allocated 15 percent of the total Chignik destined sockeye catch.

5/ During 1978, seining prior to July 11 was disallowed in Beaver, Balboa, and Stepovak Bays. The set gillnet fishery was allowed to fish 3 days per week thorough July 10 after which the fishery was managed on the basis of local stocks.

6/ During 1979-1984, 5 days per week were allowed at Balboa-Stepovak (including Beaver Bay) with a ceiling of 60,000 estimated Chignik destined sockeye, prior to July 11. If the Chignik Area sockeye catch was 1,000,000 or more before July 11, the 60,000 ceiling was to be dropped.

7/ Beginning in 1985, Balboa-Stepovak was placed on an allocation of 6.2 percent of the total estimated Chignik sockeye catch through July 25. After July 25, Balboa-Stepovak is managed on a local stock basis. The allocation was changed to an even 6 percent beginning in 1988. Seining is still not allowed prior to July 11.

8/ Balboa-Stepovak includes Beaver Bay. This fishery is also referred to as the Southeastern District Mainland fishery.

Table 8. ORZINSKI (ORZENOI SOCKEYE RUNS) AND TOTAL SOUTHEASTERN DISTRICT MAINLAND SOCKEYE CATCHES.

Year	Orzinski Escapement*	Orzinski and American Bay Catch	Balance of Suzy Creek Dent Point Catch	Total Suzy Creek Dent Point Catch	Total Orzinski Run	Total Southeast Mainland Catch
1979	20,000	11,800	11,600	23,400	43,400	128,200
1980	12,000	9,600	10,000	20,200	32,200	131,200
1981	18,000	19,400	32,600	52,000	70,000	262,200
1982	9,000	6,100	3,400	9,500	18,500	118,000
1983	21,300	10,800	11,600	22,400	43,700	396,500
1984	18,600	18,600	52,300	70,900	89,500	633,300
1985	14,000	5,100	16,300	21,400	35,400	137,900
1986	10,300	12,500	49,200	61,700	72,000	245,500
1987	11,400	14,500	48,700	63,200	74,600	301,000
1988	19,300	14,500	45,000	59,500	78,800	158,400

*Escapements are indexed total escapements which means they are likely lower than actual total.

Table 9. PERCENT OF SOCKEYE CAUGHT BY GEAR TYPE-ENTIRE SOUTHEASTERN DISTRICT MAINLAND FISHERY*

Year	Purse Seine	Set Gill Net	Total Sockeye Catch
1976	9	91	62,000
1977	28	72	53,000
1978	13	87	35,000
1979	28	72	128,000
1980	12	88	131,000
1981	13	87	261,000
1982	7	93	118,000
1983	28	72	396,000
1984	7	93	626,000
1985	14	86	138,000
1986	9	91	246,000
1987	3	97	302,000
1988	21	79	158,000

*Includes Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, Stepovak Flats, and East Stepovak Sections of the Southeastern District.

Table 10. 1988 SHUMAGIN ISLANDS AND SOUTH UNIMAK JUNE FISHERY SOCKEYE AND CHUM SALMON CATCHES ALL GEAR

		SHUMAGINS		SOUTH UNIMAK	
		Sockeye	Chums	Sockeye	Chums
June	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				
	10				
	11	7,871	746	11,544	18,482
	12				
	13				
	14				
	15	6,122	736	43,056	35,537
	16	12,078	1,552	79,071	70,319
	17	12,959	1,745		
	18	67,730	16,014	58,890	49,915
	19				
	20				
	21	38,568	8,487	82,204	64,723
	22			35,159	26,252
	23	51,898	10,621	115,529	109,363
	24	50,481	13,103		
	25				
	26				
	27	34,523	8,942	49,004	90,174
	28				
	29				
	30				
TOTAL		**282,230**	**61,946**	**474,457**	**464,765**

Table 11. SHUMAGIN ISLAND AND SOUTH UNIMAK JUNE FISHERIES* (Fish in Thousands)

Year	Sockeye			Chum		
	Shumagins	South Unimak	Total	Shumagins	South Unimak	Total
1960	19	137	156	11	84	95
1961	55	199	254	36	157	193
1962	54	272	326	61	209	270
1963	33	116	149	36	81	117
1964	85	159	244	67	161	228
1965	207	568	775	45	121	166
1966	54	528	582	17	215	232
1967	69	186	255	51	73	124
1968	233	342	575	51	115	166
1969	76	781	857	13	254	267
1970	153	1,530	1,683	49	403	452
1971	45	565	610	115	554	669
1972	76	443	519	108	468	576
1973	23	239	263	23	189	212
1974	NF	NF	NF	NF	NF	NF
1975	49	190	239	36	65	101
1976	72	235	307	74	327	401
1977	46	193	239	22	93	115
1978	68	419	487	18	105	123
1979	179	683	862	41	64	105
1980	572	2,731	3,303	71	457	528
1981	351	1,474	1,825	54	521	575
1982	451	1,670	2,121	160	934	1,094
1983	416	1,545	1,961	169	615	784
1984	257	1,131	1,388	109	228	337
1985	367	1,495	1,862	134	345	479
1986	156	314	470	99	252	351
1987	141	652	793	37	406	443
1988	282	474	756	62	465	527

*The South Unimak figures include some early July catches.

Table 12. SOUTH UNIMAK JUNE FISHERY DAILY SOCKEYE CATCHES (Figures in Thousands of Fish)

Date	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
June 1									0.1				
2			0.1						0.1				
3			0.2						0.2				
4		0.2		0.3					1.0				
5	0.6		0.1						0.8		0.2		
6	0.4	0.2			0.1			1.1	1.6		1.1		
7	0.2	0.8		7.2				3.2	9.4	0.3	0.1		
8	0.2			9.6			0.2	2.1	12.9	0.3	0.2		
9			5.0	14.3	0.3		0.7	2,3	15.0	0.7	3.9		
10		0.6	3.8	27.8	8.1	1.3	4.6	9.5	22.6	2.4	0.7		
11	3.5	7.5	0.6	30.5		0.9	8.2	18.0	24.5	2.5		5.0	
12	3.5	9.0	2.9			0.9	4.5	25.2	6.2	0.9	11.4	8.3	
13	6.5	9.5			26.6	6.3	7.8	50.7	13.0		15.3	7.7	
14	9.4	5.4		17.8	5.5	0.3	18.1	33.6	21.8	2.7	9.4	15.8	
15	12.3		10.5	35.1	9.7	3.8	21.8	19.1	54.4	23.2	1.3		
16			14.3	46.4	9.1	27.9	28.7	28.6	63.9	16.6	8.2		
17		1.0	23.5	45.9	69.8	29.1	30.5	61.2	38.4	19.0	2.0		
18	26.9	5.6	10.8	50.4		16.5	31.3	65.7	8.1	24.0			
19	29.9	14.1	12.8			1.8	36.2	106.6	231.6	18.1	66.8	27.0	
20	45.9	16.4			104.8	7.8	35.3	56.2	245.6		79.8		
21	26.1	4.1		58.5	65.5	29.4	24.6	55.9	271.2	37.6	39.2		
22	8.9		20.1	51.8	33.5	7.8	12.3	17.5	189.5	53.6	41.8	42.5	
23			17.5	65.1	19.3	5.5	10.5	12.9	38.6	21.5	29.3	56.0	
24		8.7	6.2	60.8	40.5	13.4	9.0	30.5	16.5	39.7	22.8	50.3	
25	28.9	9.3	16.1	19.6		11.6	12.2	34.9	46.5	28.7			
26	31.6	2.7	4.5			6.0	8.0	46.0	78.0	11.3	27.9		
27	13.9	4.8			58.7	1.4	5.6	43.4	47.2		15.0		
28	13.8	3.2		9.0	31.3	0.6	5.3	40.0	43.6	28.2	16.6		
29	5.3		0.3	9.0	27.6	1.9	0.8	9.6	7.8	39.4	18.3	10.0	
30			0.8	7.0	12.1	1.4	1.6	1.8	9.7	47.9	16.0		

Table 12. (continued)

Date	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
June 1						0.3	0.1		0.5					
2							0.3	0.9	3.7					
3		0.1					0.3	0.2	7.1	25.0	2.4			
4							0.6	1.6	9.7	49.2				
5				0.3	0.5		0.0	1.3	39.6		11.8			
6				0.1	1.6		0.6	3.6	80.8					
7		1.0		0.4	0.9			2.4			39.2			
8		1.4	0.3	0.1	1.5	4.1	1.9	3.1					4.4	
9			0.4	0.4	2.5	5.0	6.4	1.6			79.4			
10	1.4	1.3	2.3	0.3	1.7	3.2	6.6	7.2					10.0	
11		5.1			3.7		47.6	12.7				8.3	17.8	11.5
12	8.9			5.2	1.6		73.6	13.7	200.7	486.2	200.4			
13			2.7	5.4	18.3		144.1	6.0	290.5	123.2				
14		4.8		16.5	24.2		119.7	3.3	301.1		389.0	55.1	44.2	
15		10.8	4.0	21.3	14.3	53.7	71.8	119.0					47.8	43.1
16	15.8		24.3	6.0	29.0	250.2	21.0	143.4				30.6		79.1
17		15.6	26.6	4.4	33.1	267.2		156.7					85.4	
18	38.5	26.9	29.8	37.0	92.1	313.4		105.5				91.7	66.7	58.9
19				46.2	71.7	187.8	202.4	131.3	420.3	465.8	181.6			
20	10.1		68.0	38.8	118.8	198.7	226.3	22.9					56.5	
21		38.9		38.5	96.1	397.0	218.9	111.5	191.0		258.1	65.6	97.8	82.2
22		1.3		17.8	20.8	234.9	138.1	120.8					76.5	35.2
23	40.1	44.0		54.3	22.9	107.2		155.5			333.1	20.5		115.5
24	42.9		8.9	29.0	32.6	256.9		170.0				17.3		
25	33.0	14.9	28.0		27.3	146.5		9.3				25.2	45.0	
26		51.0		47.3	21.9	114.5	99.7	124.1					100.3	
27				49.5	20.0	79.6	51.9	75.7						49.0
28		3.5			14.8	82.6	24.4	23.7						
29		4.5				25.1		81.4						
30		6.5				3.4	18.0	61.4						
July 1		4.1			1.1									
2					0.5									
3					9.6									

Table 13. SHUMAGIN ISLANDS JUNE FISHERY DAILY SOCKEYE CATCHES (Figures in Thousands of Fish)

Date	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
June 1	0.1			0.2									
2									0.1				
3			0.2						0.1				
4	0.5	0.2	0.1					0.4	1.2				
5	0.1	0.5	0.3										
6	0.1				0.1								
7	0.5	0.1		10.7				0.2	0.7	0.1			
8				7.2			1.9	0.3	2.2	0.1			
9			4.9	14.3	1.2		2.2	0.6	11.2	0.1	0.6		
10		0.7	3.3	18.0	0.1	0.9	4.7	0.9	3.5	0.2	0.9		
11	0.3	3.8	0.4	5.8		2.4	9.4		2.0	0.4	0.9	0.2	
12	0.5	1.7		18.4		0.1	13.3	5.7	1.1	0.9	0.8	0.7	
13	0.9	1.5		7.4	4.6	2.5	12.3	21.8	3.8		1.0	0.5	
14	2.2	2.3		6.7	1.8	5.8	7.0	2.1	3.8	0.2	1.7	1.8	
15	3.6		1.7	2.5	0.2	6.4	10.3	0.1	6.0	1.9			
16			3.9	3.3	2.2	6.3	9.8	4.7	6.6	0.4	1.2		
17		1.9	9.0	24.6	2.1	0.7	15.3	4.7	11.7	1.3	2.7		
18	4.9	2.1	5.0	17.9		1.3	23.9	2.3		1.0		1.1	
19	3.6	2.3	2.2	5.3		8.8	26.3	5.5	9.2	1.9	8.2	2.9	
20	8.1	3.3		18.8	8.5	5.8	17.7	2.2	16.6	2.4	0.2	0.7	
21	3.2	5.6		12.0	2.0	3.2	10.9	1.0	19.1	2.7	7.3	1.4	
22	1.2		10.0	13.2	2.8	0.1	12.0	1.9	3.8	4.2	5.6		
23			11.1	3.1	2.7	1.3		3.9	2.4	2.1	2.2		
24		1.8	5.6	2.7	2.7	5.2	9.6	3.2	0.5	1.4	12.2		
25	4.3	2.5	13.2	2.7		5.8	18.6	2.9	20.3	2.3	1.8	0.6	
26	6.6	1.0	13.5			4.0	11.7	5.0	9.7	6.0	5.2		
27	5.6	0.5		0.1	8.7	2.5	7.6	3.5	0.3	2.7	6.0		
28	5.0	1.2		0.2	9.2	3.0	4.5	2.7	4.4	2.4	8.1	13.1	
29	2.4		4.4	0.6	4.0	1.8	4.3	3.2	2.4	2.9	4.6		
30			1.9	4.7	1.2	0.9		1.2	2.8	1.7	1.8		
July 1								1.4	1.4	2.9			
2								1.9	3.4	2.9		1.9	
3								1.3	2.9		0.6	2.0	
4								2.7			0.4	2.4	
5											1.0	1.4	

Table 13. (continued)

Date	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
June 1														
2									2.0					
3		0.2							1.6	6.4	7.0			
4		0.1							7.8	16.5				
5									13.0		9.5			
6									7.9					
7		0.3									42.6			
8		0.1	0.1				2.3						0.1	
9			3.4					0.3						
10		0.5	3.7				1.6	1.5					31.6	
11	2.8	1.0		0.4			26.7	0.9				6.3		7.9
12				3.7			22.3		90.8	75.1	59.9			
13	2.3		12.1	3.6	6.2		32.7		87.1	39.9				
14		1.1		0.1	12.7		37.0	1.6	78.6		75.5	28.4	23.6	
15		4.5		9.1	12.4	58.1	20.3	14.9						6.1
16	5.7			4.4	4.9	55.4	40.3	25.8				25.0		12.1
17		5.5		0.2	7.8	31.1		40.7						13.0
18	23.9	12.5		5.0	8.6	34.4		23.4				14.0		67.7
19				5.7	16.8	10.1	24.3	42.8	127.7	76.3	53.0			
20	20.2		26.5	2.6	13.6	20.6	54.2	23.5					55.1	
21		26.7		2.3	21.3	32.7	43.4	63.8			62.2	22.6		38.6
22				0.1	7.1	17.4	36.4	98.0						
23		19.7		3.3	8.0	13.4		65.9				23.0		51.9
24				4.8	4.1	6.3						13.3		50.5
25					17.8	13.0						23.5		
26				10.1	18.5	73.6		47.7		42.5	26.2		30.2	
27				7.1	10.7	47.1								34.5
28				5.4	8.7	45.2					30.0			
29						10.7								
30						6.0								
July 1						13.5								
2						29.9								
3						15.6								
4						38.0								

Table 14. SOUTH UNIMAK JUNE FISHERY DAILY CHUM CATCHES (Figures in Thousands of Fish)

Page		1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
June	1		NF							0.2		0.8					
	2		NF				1.0			0.5	3.6	5.6					
	3		NF		0.3					0.6	1.0	7.3	12.9	8.9			
	4		NF							1.2	2.7	13.0	32.5				
	5		NF				0.1	0.4			3.0	17.3		34.1			
	6		NF				0.1	2.6		1.2	9.2	31.2					
	7		NF		3.6	0.2	0.4	0.7			10.2			36.0			
	8		NF		8.6	0.4	0.1	1.9	0.3	1.8	13.3					4.9	
	9		NF			0.9	0.2	1.3	0.4	10.9	4.2			53.0			
	10		NF	2.1	13.9	4.2	1.1	1.5	1.6	4.8	10.4					10.9	
	11	11.1	NF		55.4			3.4		24.0	19.8				13.8	22.5	18.5
	12	14.8	NF	7.0			2.9	0.7		36.0	35.8	88.5	90.7	48.5			
	13	16.9	NF			2.0	1.9	3.9		48.2	13.5	109.0	23.4				
	14	26.8	NF		14.9		4.3	7.1		24.1	7.0	99.3		65.7	54.8	24.1	
	15		NF		32.8	2.2	5.4	1.9	8.3	10.4	98.2					30.2	35.5
	16		NF	13.4		18.7	2.6	0.7	36.7	7.5	105.0				35.3		70.3
	17		NF		31.7	12.5	1.6	1.1	41.3		92.0					63.8	
	18		NF	8.9	52.0	12.0	7.2	2.2	58.2		57.9				97.5	54.9	49.9
	19	25.2	NF				7.7	2.7	34.0	45.6	66.6	169.6	68.4	36.3			
	20		NF	3.3		21.6	3.7	6.8	27.4	39.7	6.4					23.1	
	21		NF		23.4		11.0	7.5	51.9	37.9	52.2	73.3		19.5	32.0	48.0	64.7
	22	19.2	NF				2.0	3.3	44.0	26.9	43.4					42.7	26.3
	23	26.0	NF	9.4	30.7		10.6	3.1	24.1		55.8			42.7	6.6		109.4
	24	31.4	NF	21.2		6.2	9.3	2.7	52.7		50.6				4.7		
	25		NF		14.6	13.4		1.6	24.5		2.3				8.1	24.2	
	26		NF		44.1		12.8	2.4	18.3	47.3	43.7					56.6	
	27		NF				17.4	2.9	18.5	75.1	42.7						90.2
	28		NF		2.5			0.7	11.4	42.8	7.9						
	29	10.7	NF		3.4				2.1		45.3						
	30		NF		4.5				1.3	34.5	30.6						

Table 15. SHUMAGIN ISLANDS JUNE FISHERY DAILY CHUM CATCHES (Figures in Thousands of Fish)

Date		1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
June	1				0.1												
	2											4.6					
	3				2.3							6.8	2.3	11.3			
	4				0.8							6.4	11.8				
	5											14.0		13.0			
	6											5.4					
	7				0.8									31.0			
	8				0.1	0.2				3.3							
	9			0.2		5.5					1.2						
	10				5.4	3.5				1.5	3.2					8.9	
	11	0.5		5.2	6.3					8.1	1.6				3.9		0.7
	12	1.4					1.6			5.9		34.1	26.8	15.2			
	13	0.7		1.6		8.4	1.9	1.8		4.3		40.3	13.0				
	14	2.9			1.3			4.7		3.0	6.2	23.3		20.0	23.0	6.8	
	15				7.5		1.8	2.1	5.9	1.4	12.9						0.7
	16			5.3			1.1	1.4	3.3	3.8	12.7				14.2		1.6
	17				9.9			2.2	6.0		16.2						1.7
	18			12.6	12.6		0.8	2.6	2.9		6.8				12.1		16.0
	19	6.1					0.9	4.1	1.5	4.4	9.0	34.3	16.6	10.1			
	20			10.6		4.4	0.6	2.7	1.2	6.2	9.7					13.1	
	21				15.5		0.7	3.4	2.2	5.6	17.5			15.0	10.9		8.5
	22	1.4						1.1	1.1	6.8	30.4						
	23	0.5			10.9	1.9	1.1	1.2		17.3					13.1		10.6
	24					2.3	0.4	0.9							8.5		13.1
	25						3.5	1.6							13.3		
	26					2.9	3.8	7.2		15.6			38.6	8.9		8.2	
	27					1.1	3.9	4.9									8.9
	28	9.4				0.8	2.2	5.8						9.1			
	29							2.5									
	30							2.1									

Table 16. SOUTH UNIMAK SALMON CATCHES BY GUIDELINE HARVEST LEVEL PERIODS SOCKEYE VS. CHUMS
(Figures in Thousands of Fish)

Year	June 1 - 11			June 12 - 18			June 19 - 25			June 26 - **		
	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums
1975	(1)	1	2	(3)	63	28	(4)	126	34		-	-
1976	(5)	9	82	(4)	60	137	(3)	99	69	(5)	69	32
1977	(3)	6	6	(5)	85	46	(3)	103	41		-	-
1978	(6)	1	3	(7)	96	32	(6)	225	44	(2)	97	30
1979	(7)	12	12	(7)	213	18	(7)	390	27	(6)	68	7
1980	(4)	12	2	(4)	885	144	(7)	1,529	259	(5)	305	52
1981	(10)	64	45	(5)	430	126	(4)	786	150	(4)	194	200
1982	(10)	36	77	(5)	548	409	(6)	721	277	(5)	366	170
1983	(6)	141	75	(3)	793	298	(2)	613	246		-	-
1984	(2)	75	51	(1)	593	114	(1)	464	68		-	-
1985	(4)	133	132	(2)	589	114	(3)	743	99		-	-
1986	(1)	8	14	(3)	177	186	(4)	129	52		-	-
1987	(3)	32	38	(4)	244	173	(4)	276	138	(1)	100	57
1988	(1)	12	18	(3)	181	156	(3)	233	200	(1)	49	90

* Figures in parenthesis are fishing days.

**The fishery was extended into early July during 1976 and 1979, those figures are included.

Table 17. SHUMAGIN ISLANDS SALMON CATCHES BY GUIDELINE HARVEST LEVEL PERIODS SOCKEYE VS. CHUMS
(Figures in Thousands of Fish)

Year	June 1 - 11			June 12 - 18			June 19 - 25			** June 26 -		
	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums	*	Sockeye	Chums
1975	(1)	3	5	(3)	26	20	(1)	20	11		-	-
1976	(6)	2	13	(4)	24	31	(2)	46	26		-	-
1977	(3)	7	9	(1)	12	8	(1)	27	4		-	-
1978		-	-	(5)	26	6	(6)	19	7	(3)	23	5
1979		-	-	(6)	53	15	(7)	89	16	(3)	38	10
1980		-	-	(4)	179	18	(7)	114	10	(9)	280	44
1981	(3)	31	13	(5)	153	26	(4)	158	23		-	-
1982	(3)	3	6	(4)	106	55	(5)	294	84	(1)	48	16
1983	(5)	32	37	(3)	257	98	(1)	128	34		-	-
1984	(2)	23	14	(1)	116	40	(1)	76	17	(1)	43	39
1985	(3)	60	55	(2)	135	33	(2)	115	25	(2)	56	18
1986	(1)	6	4	(3)	67	49	(4)	82	46		-	-
1987	(1)	32	9	(1)	24	7	(1)	55	13	(1)	30	8
1988	(1)	8	1	(4)	99	20	(3)	141	32	(1)	35	9

* Figures in parenthesis are fishing days.

**The fishery was extended into early July during 1980, those figures are included.

Table 18. SHUMAGIN ISLAND AND SOUTH UNIMAK JUNE FISHERIES (Fish in Thousands)

Year	SHUMAGINS			UNIMAK			TOTAL		
	Sockeye	Chum	Sockeye/ Chum	Sockeye	Chum	Sockeye/ Chum	Sockeye	Chum	Sockeye/ Chum
1960	19	11	1.73	137	84	1.63	156	95	1.64
1961	55	36	1.52	199	157	1.26	254	193	1.32
1962	54	61	.88	272	209	1.30	326	270	1.21
1963	33	36	.91	116	81	1.43	149	117	1.27
1964	85	67	1.27	159	161	0.99	244	228	1.07
1965	207	45	4.60	568	121	4.69	775	166	4.67
1966	54	17	3.18	528	215	2.46	582	232	2.51
1967	69	51	1.35	186	73	2.55	255	124	2.06
1968	233	51	4.57	342	115	2.97	575	166	3.46
1969	76	13	5.85	781	254	3.07	857	267	3.21
1970	153	49	3.12	1,530	403	3.80	1,683	452	3.72
1971	45	115	0.39	565	554	1.02	610	669	0.91
1972	76	108	0.70	443	468	0.95	519	576	0.90
1973	23	23	1.00	239	189	1.26	263	212	1.24
1974	NF	NF	-	NF	NF	-	NF	NF	-
1975	49	36	1.36	190	65	2.92	239	101	2.37
1976	72	74	0.97	235	327	0.72	307	401	0.77
1977	46	22	2.09	193	93	2.08	239	115	2.08
1978	68	18	3.78	419	105	3.99	487	123	3.96
1979	179	41	4.37	683	64	10.67	862	105	8.21
1980	572	71	8.06	2,731	457	5.98	3,303	528	6.26
1981	351	54	6.50	1,474	521	2.83	1,825	575	3.17
1982	451	160	2.82	1,670	934	1.79	2,121	1,094	1.94
1983	416	169	2.46	1,545	615	2.51	1,961	784	2.50
1984	257	109	2.36	1,131	228	4.96	1,388	337	4.12
1985	367	134	2.74	1,495	345	4.33	1,862	479	3.89
1986	156	99	1.58	314	252	1.25	470	351	1.34
1987	141	37	3.81	652	406	1.61	793	443	1.79
1988	282	62	4.55	474	465	1.02	756	527	1.43

Table 19. SOCKEYE PER CHUM SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE FISHERY

SOUTH UNIMAK

Year	Purse Seine	Drift Gillnet	Set Gillnet	All Gear
1977	3.1	2.0	4.9	2.1
1978	7.2	3.6	27.5	4.0
1979	24.4	4.5	14.7	10.7
1980	5.8	6.7	54.2	6.0
1981	2.3	3.7	21.4	2.8
1982	2.1	1.5	11.1	1.8
1983	2.3	2.9	12.8	2.5
1984	5.2	4.4	36.4	5.0
1985	6.4	2.8	13.2	4.3
1986	1.3	1.2	6.7	1.2
1987	1.5	1.6	5.2	1.6
1988	0.9	1.0	5.2	1.0
Average	**5.2**	**3.0**	**17.8**	**3.6**

SHUMAGIN ISLANDS

Year	Purse Seine	Set Gillnet	Total
1977	2.0	10.6	2.1
1978	3.8	1.2	3.8
1979	4.2	7.7	4.4
1980	8.0	9.0	8.1
1981	6.2	25.5	6.5
1982	2.8	6.7	2.8
1983	2.4	16.3	2.5
1984	2.2	19.2	2.4
1985	2.7	4.3	2.7
1986	1.4	4.7	1.6
1987	3.1	13.2	3.8
1988	4.1	5.6	4.6
Average	**3.6**	**10.3**	**3.8**

Table 20. SOCKEYE PER CHUM BY TIME PERIOD (All Gear)

Year	June 1-11	June 12-18	June 19-25	June 26-30	June Total
			SOUTH UNIMAK		
1975	.50	2.25	3.71	-	2.92
1976	.11	.44	1.43	2.16	.72
1977	1.00	1.85	2.51	-	2.08
1978	.33	3.00	5.11	3.23	3.99
1979	1.00	11.83	14.44	9.71	10.67
1980	6.00	6.15	5.90	5.87	5.98
1981	1.42	3.41	5.24	.97	2.83
1982	.47	1.34	2.60	2.15	1.79
1983	1.88	2.67	2.49	-	2.51
1984	1.47	5.20	6.82	-	4.96
1985	1.01	5.16	7.84	-	4.33
1986	.57	.95	2.48	-	1.25
1987	.84	1.41	2.01	1.79	1.61
1988	.67	1.16	1.15	.55	1.02
Average	1.2	3.3	4.6	3.3	3.3
			SHUMAGIN ISLANDS		
1975	.60	1.30	1.82	-	1.36
1976	.15	.77	1.77	-	.97
1977	.78	1.50	6.75	-	2.09
1978	-	4.33	2.71	4.60	3.78
1979	-	3.53	5.56	3.80	4.37
1980	-	9.94	11.40	6.36	8.06
1981	2.38	5.88	6.87	-	6.50
1982	.50	1.93	3.50	3.00	2.82
1983	.86	2.62	3.76	-	2.46
1984	1.64	2.90	4.47	1.10	2.36
1985	1.08	3.84	4.59	3.14	2.74
1986	1.50	1.37	1.78	-	1.58
1987	3.55	3.46	4.20	3.69	3.81
1988	8.00	4.95	4.41	3.89	4.55
Average	1.9	3.5	4.5	3.7	3.4

Table 21. PERCENT COMPOSITION OF SOCKEYE AND CHUM CATCHES BY GEAR TYPE 1977 - 1988

SOUTH UNIMAK JUNE FISHERY

	Sockeye			Chum		
Year	Seine	Drift Gillnet	Set Gillnet	Seine	Drift Gillnet	Set Gillnet
1977	15.0	84.5	0.5	10.8	89.0	0.2
1978	18.1	81.4	0.5	9.9	90.0	0.1
1979	71.0	28.8	0.2	31.0	68.9	0.1
1980	76.0	23.5	0.5	79.0	20.9	0.1
1981	51.0	46.9	2.1	64.0	35.7	0.3
1982	54.0	44.8	1.2	46.0	53.8	0.2
1983	60.0	39.3	0.7	66.0	33.9	0.1
1984	64.0	35.0	1.0	60.0	39.9	0.2
1985	62.0	37.3	0.7	42.0	57.8	0.2
1986	46.7	51.7	1.6	43.8	55.9	0.3
1987	36.5	61.4	2.1	38.4	60.9	0.7
1988	29.8	67.0	3.2	33.6	65.8	0.6
Average	**48.7**	**50.1**	**1.2**	**43.7**	**56.0**	**0.3**

SHUMAGIN ISLANDS JUNE FISHERY

	Sockeye		Chum	
Year	Seine	Set Gillnet	Seine	Set Gillnet
1977	94.9	5.1	99.0	1.0
1978	97.2	2.8	96.3	3.7
1979	92.4	7.6	95.7	4.3
1980	96.4	3.6	96.7	3.3
1981	94.8	5.2	98.7	1.3
1982	97.3	2.7	98.9	1.1
1983	97.4	2.6	99.6	0.4
1984	94.7	5.3	99.3	0.7
1985	95.2	4.8	97.0	3.0
1986	85.0	15.0	95.0	5.0
1987	75.5	24.5	93.0	7.0
1988	62.8	37.2	69.7	30.3
Average	**90.3**	**9.7**	**94.9**	**5.1**

Table 22. SOUTH PENINSULA JUNE FISHERY VS. ACTUAL BRISTOL BAY HARVEST, SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Peninsula Catch	S. Peninsula % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	S. Peninsula GHL if Actual Bristol Bay Catch Was Forecasted
1975	215,000	4.39	239,000	4.88	4,899,000	407,000
1976	425.000	7.56	307,000	5.46	5,619,000	466,000
1977	237,000	4.86	239,000	4.90	4,878,000	405,000
1978	522,000	5.26	487,000	4.91	9,928,000	824,000
1979	1,100,000	5.13	862,000	4.02	21,429,000	1,779,000
1980*	3,068,000	12.91	3,303,000	13.90	23,762,000	1,972,000
1981	1,760,000	6,87	1,825,000	7.13	25,503,000	2,125,000
1982	2,258,000	14.95	2,121,000	14.04	15,104,000	1,254,000
1983	1,793,000	4.80	1,961,000	5,25	37,372,000	3,102,000
1984	1,356,000	5.49	1,389,000	5.62	24,710,000	2,051,000
1985	1,685,000	7.11	1,862,000	7.86	23,703,000	1,967,000
1986**	1,107,000	6.97	470,000	2.96	15,889,000	1,319,000
1987	775,000	4.83	793,000	4.94	16,048,000	1,332,000
1988**	1,542,000	11.01	756,000	5.40	14,011,000	1,163,000

* 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Includes only South Unimak and Shumagin June fisheries. Target percentage is 8.3

NOTE: 1986 through 1988 Bristol Bay catch figures are preliminary.

Table 23. SOUTH UNIMAK JUNE FISHERY VS. ACTUAL BRISTOL BAY HARVEST, SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual S. Unimak Catch	S. Unimak % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	S. Unimak GHL if Actual Bristol Bay Catch Was Forecasted
1975	165,000	3.37	190,000	3.88	4,899,000	333,000
1976	350,000	6.23	235,000	3.18	5,619,000	382,000
1977	195,000	4.00	193,000	3.96	4,878,000	332,000
1978	428,000	4.31	419,000	4.22	9,928,000	675,000
1979	900,000	4,20	683,000	3.19	21,429,000	1,457,000
1980*	2,513,000	10.58	2,731,000	11.49	23,762,000	1,616,000
1981	1,442,000	5.63	1,474,000	5.76	25,603,000	1,741,000
1982	1,850,000	12.21	1,670,000	11.03	15,146,000	1,030,000
1983	1,469,000	3.93	1,545,000	4.13	37,372,000	2,541,000
1984	1,111,000	4.50	1,132,000	4.58	24,710,000	1,680,000
1985	1,380,000	5.82	1,495,000	6.31	23,703,000	1,612,000
1986**	907,000	5.71	314,000	1.98	15,889,000	1,080,000
1987	635,000	3.96	652,000	4.06	16,048,000	1,091,000
1988**	1,263,000	9.01	474,000	3.38	14,011,000	883,000

* 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Target percentage is 6.8

NOTE: 1986 through 1988 Bristol Bay catch figures are preliminary.

Table 24. SHUMAGIN ISLANDS JUNE FISHERY VS. ACTUAL BRISTOL BAY HARVEST, SOCKEYE SALMON

Year	Guideline Harvest Level (GHL)	GHL % of Actual Bristol Bay Catch	Actual Shumagins Catch	Shumagins % of Actual Bristol Bay Catch	Actual Bristol Bay Catch	Shumagin GHL if Actual Bristol Bay Catch Was Forecasted
1975	50,000	1.02	49,000	1.00	4,899,000	73,000
1976	75,000	1.33	72,000	1.28	5,619,000	84,000
1977	42,000	0.86	46,000	0.94	4,878,000	73,000
1978	94,000	0.95	68,000	0.68	9,928,000	149,000
1979	200,000	0.93	179,000	0.84	21,429,000	321,000
1980*	555,000	2.34	572,000	2.41	23,762,000	356,000
1981	318,000	1.24	351,000	1.37	25,603,000	384,000
1982	408,000	2.70	451,000	2.99	15,104,000	227,000
1983	324,000	0.87	416,000	1.11	37,372,000	561,000
1984	245,000	0.99	257,000	1.04	24,710,000	371,000
1985	305,000	1.29	367,000	1.55	23,703,000	356,000
1986**	200,000	1.26	156,000	0.98	15,889,000	238,000
1987	140,000	0.87	141,000	0.88	16,048,000	241,000
1988**	279,000	1.99	282,000	2.01	14,011,000	210,000

* 1980 Bristol Bay sockeye catch would have been much larger had it not been for a lengthy strike.

**The guideline harvest level if chum salmon restrictions were not placed on the fishery.

Target percentage is 1.5.

NOTE: 1986 through 1988 Bristol Bay catch figures are preliminary.

Table 25. Number of Limited Entry Permits[a] and Fishing Effort[b] in the Alaska Peninsula Area

	PURSE SEINE		DRIFT GILLNET			SET GILLNET		
YEAR	Area M Permits[a] Available	Area M Permits Fished	Area M Permits Available	Area M Permits[c] Fished	Area T Permits Fished	Area M Permits Available	Area M Permits[c] Fished	Area T Permits Fished
1976	114	(90)	155	(119)	(10)	115	(53)	(6)
1977	113	(87)	156	(114)	(16)	108	(57)	(8)
1978	123	(114)	158	(133)	(27)	113	(61)	(8)
1979	123	(130)	161	(167)	(18)	113	(78)	(13)
1980	126	(125)	163	(157)	(24)	113	(88)	(16)
1981	127	(122)	164	(155)	(18)	115	(88)	(21)
1982	127	(119)	164	(159)	(23)	115	(93)	(18)
1983	127	(121)	166	(159)	(18)	114	(94)	(7)
1984	126	(121)	165	(160)	(44)	113	(104)	(15)
1985	127	(123)	165	(161)	(44)	113	(102)	(18)
1986	125	(121)	165	(164)	(37)	114	(100)	(7)
1987	125	(115)	165	(163)	(48)	114	(108)	(9)
1988	125	(114)	165	(162)	(59)	114	(106)	(14)

[a]Includes both permanent permits and interim use permits. In 1987 there were 6 interim use seine permits, 7 drift gillnet permits and 1 set gillnet permit.

[b]Making at least one delivery during the year.

[c]During a portion of the season, in specific sections, Area T set and drift gillnet fishermen are allowed to fish in the Alaska Peninsula Area, Area M. Therefore the number of permits fished may be higher than the number of Area M permits.

Table 26. SALMON GEAR ON SOUTH SIDE OF ALASKA PENINSULA AREA DURING JUNE

Year	Purse Seine	Drift Gill Net	Set Gill Net
1976	25	94	16
1977	15	98	16
1978	22	106	17
1979	33	100	22
1980	51	123	24
1981	74	126	32
1982	85	126	33
1983	92	139	41
1984	104	143	52
1985	105	140	51
1986	102	153	50
1987	84	140	62
1988	89	147	63

During the peak of the South Unimak-Shumagin June fishery (June 12-25), approximately 30-40 seiners fish the Shumagins. During the few occasions when South Unimak is open and Shumagins closed, nearly the entire purse seine fleet is at Unimak. Drift net effort declines after June 20 as the fleet begins moving to Port Moller.

Table 27. UNITS OF GEAR USED IN ALASKA PENINSULA AREA*

	SEINERS FISHING SOUTH UNIMAK & SHUMAGINS DURING JUNE	SEINERS FISHING UNALASKA ONLY	FISHED NORTH PENINSULA ONLY DURING JUNE	TOTAL JUNE SEINERS
1987	84	1	4	89
1988	89	2	0	91

	DRIFT GILLNETTERS FISHING SO. UNIMAK & SHUMAGINS DURING JUNE	FISHED NORTH PENINSULA ONLY DURING JUNE (M)	TOTAL AREA M DRIFT GILLNETTERS
1987	140	15	155
1988	147	15	162

	INNER PORT HEIDEN SPRING DRIFT GILLNETTERS (AREA T)	INNER PORT HEIDEN FALL ONLY DRIFT GILLNETTERS (T)	TOTAL INNER PORT HEIDEN DRIFT GILLNETTERS
1987	20	4	24
1988	18	5	23

	AREA T DRIFT GILLNETTERS FISHING ILNIK & OUTER PORT HEIDEN SECTIONS	AREA T DRIFT GILLNETTERS FISHING CINDER RIVER SECTION EXCLUSIVE OF ILNIK & PORT HEIDEN
1987	17	10
1988	19	19

	TOTAL AREA T DRIFT GILLNETTERS (SEASON)
1987	51
1988	61

SET GILLNETTERS (AREA M)

	Sand Point	So. Unimak	No. Unimak (only)	Nelson Lagoon	Port Moller to Port Heiden (only)	Total Area M
1987	55	9	1	25	7	97
1988	52	11	0	28	7	98

SET GILLNETTERS (AREA T)

	Inner Port Heiden	Cinder River	TOTAL AREA T
1987	5	5	10
1988	6	7	13

*During July and August some gillnet (both drift and set) fishermen who have seine permits hand purse seine pink and chum salmon. Three Sand Point set gillnetters listed are seiners during most of the year.

Table 28. SOUTH UNIMAK-SHUMAGIN ISLANDS JUNE FISHERY REGULATION HISTORY 1962-1988

Year	South Unimak	Shumagin Islands
1962-66	5 days per week	5 days per week
1967-70	7 days per week	7 days per week
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week
1973	*Four 13 hour fishing periods per week	*Four 13 hour fishing periods per week.

Both fisheries were closed by emergency order during June 25-28 due to indications of the Bristol Bay run being below escapement requirements.

1974	No fishery	No fishery
1975-83	* 6.8% of predicted Bristol Bay catch	1.5% of predicted Bristol Bay catch

No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).

1986	* 6.8% allocation minus June 26-30 segment Windows No fishing before June 11	1.5% allocation minus June 26-30 segment Windows No fishing before June 11

A 400,000 chum salmon ceiling placed on both fisheries combined.

1987	* Same as during 1984-85 for both fisheries.	
1988 to Present	* 6.8 of predicted Bristol Bay catch Windows	1.5% of predicted Bristol Bay catch Windows

A 500,000 chum salmon ceiling placed on both fisheries combined.

*Each sockeye allocation is broken down into time period guideline harvest levels.

Dates	South Unimak	Shumagins
June 1 - 11	5%	9%
June 12 - 18	29%	28%
June 19 - 25	51%	41%
June 26 - 30	15%	22%
	100%	100%

Table 29. SOUTH PENINSULA SALMON RUNS* (In Thousands of Fish)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1962	Catch	3.3	420.0	12.5	1,965.4	824.8
	Escapement	0	18.8	-	1,598.8	399.4
	Total	3.3	438.8	-	3,564.2	1,224.2
1963	Catch	1.9	204.4	16.5	2,367.7	461.3
	Escapement	0	23.0	-	1,317.9	446.7
	Total	1.9	227.4	-	3,685.6	908.0
1964	Catch	2.0	370.8	13.6	2,740.3	751.0
	Escapement	0	15.7	-	1,436.4	454.8
	Total	2.0	386.5	-	4,176.7	1,205.8
1965	Catch	2.1	915.7	34.2	2,884.1	556.4
	Escapement	0	12.1	-	1,035.4	228.0
	Total	2.1	927.8	-	3,919.5	784.4
1966	Catch	1.4	606.2	6.3	305.8	494.4
	Escapement	0	17.0	-	719.4	422.0
	Total	1.4	623.2	-	1,025.2	916.4
1967	Catch	1.6	294.1	2.9	78.3	245.2
	Escapement	0	16.2	-	445.5	182.9
	Total	1.6	310.3	-	523.8	428.1
1968	Catch	1.4	699.8	31.1	1,287.1	325.3
	Escapement	0	12.8	-	823.3	279.1
	Total	1.4	712.6	-	2,110.4	604.4
1969	Catch	1.9	912.8	10.9	1,219.1	389.2
	Escapement	0	29.5	-	2,474.9	134.6
	Total	1.9	942.3	-	3,694.0	523.8
1970	Catch	1.8	1,794.6	32.2	1,723.4	981.7
	Escapement	0	16.5	-	1,298.9	280.5
	Total	1.8	1,811.1	-	3,022.3	1,262.2
1971	Catch	2.2	715.5	16.8	1,450.1	1,366.6
	Escapement	0	19.4	-	702.7	343.2
	Total	2.2	734.9	-	2,152.8	1,709.8
1972	Catch	1.3	557.8	8.0	78.0	727.5
	Escapement	0	11.9	-	111.4	254.5
	Total	1.3	569.7	-	189.4	982.0
1973	Catch	0.4	330.2	6.6	58.3	293.0
	Escapement	0	7.3	-	110.8	505.5
	Total	0.4	337.5	-	169.1	798.5

Table 29. (continued)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1974	Catch	0.5	204.7	9.4	100.2	71.5
	Escapement	0	95.6	-	284.4	257.3
	Total	0.5	300.3	-	384.6	328.8
1975	Catch	0.1	268.4	0	61.7	132.9
	Escapement	0	51.7	-	552.1	193.3
	Total	0.1	320.1	-	613.8	326.2
1976	Catch	2.1	375.0	0.2	2,367.0	532.5
	Escapement	0	69.7	-	1,456.4	327.2
	Total	2.1	444.7	-	3,823.4	859.7
1977	Catch	0.5	311.7	2.1	1,448.6	243.2
	Escapement	0	64.9	-	2,677.8	774.9
	Total	0.5	376.6	-	4,126.4	1,018.1
1978	Catch	0.8	579.5	60.7	5,490.0	547.0
	Escapement	0	64.8	-	2,858.7	600.5
	Total	0.8	644.3	-	8,348.7	1,147.5
1979	Catch	2.1	1,149.7	356.5	6,570.6	483.0
	Escapement	0	53.3	-	2,629.5	411.1
	Total	2.1	1,203.0	-	9,200.1	894.1
1980	Catch	4.8	3,613.0	274.2	7,861.5	1,351.2
	Escapement	0	45.9	-	2,641.6	362.4
	Total	4.8	3,658.9	-	10,503.1	1,713.6
1981	Catch	12.2	2,255.2	162.2	5,035.9	1,770.3
	Escapement	0	45.7	-	2,307.5	381.3
	Total	12.2	2,300.9	-	7,343.4	2,151.6
1982	Catch	9.8	2,346.0	256.0	6,734.9	2,272.5
	Escapement	0	39.2	-	2,293.0	386.9
	Total	9.8	2,385.2	-	9,027.9	2,659.4
1983	Catch	26.9	2,556.6	127.7	2,827.6	1,707.1
	Escapement	0	59.2	-	851.2	446.5
	Total	26.9	2,615.8	-	3,678.8	2,153.6
1984	Catch	9.2	2,318.0	309.1	11,589.3	1,656.5
	Escapement	0	54.8	-	3,811.6	699.7
	Total	9.2	2,372.8	-	15,400.9	2,356.2

Table 29. (continued)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1985	Catch	7.9	2,214.6	172.5	4,433.7	1,393.1
	Escapement	0	49.9	-	1,614.1	503.4
	Total	7.9	2,264.5	-	6,047.8	1,896.5
1986	Catch	5.6	1,223.0	235.9	4,031.5	1,749.7
	Escapement	0	48.0	-	1,716.7	544.6
	Total	5.6	1,271.0	-	5,748.2	2,294.3
1987	Catch	9.2	1,449.9	224.7	1,208.6	1,376.3
	Escapement	0	44.6	-	1,540.5	620.7
	Total	9.2	1,494.5	-	2,749.1	1,997.0
1988	Catch	11.1	1,472.9	505.5	7,044.8	1,905.2
	Escapement	0	74.1	50.0-100.0	2,839.6	496.4
	Total	11.1	1,547.0	555.5-605.5	9,884.4	2,401.6

*Escapements are indexed totals.

Table 30. SOUTH PENINSULA PINK SALMON RUNS (In Thousands of Fish)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1962	Catch	922.1	977.3	1,899.4	42	24	66
	Escapement	826.1	772.7	1,598.8			
	Total	1,748.2	1,750.0	3,498.2			
1963	Catch	1,733.9	590.8	2,324.7	14	29	43
	Escapement	886.5	431.4	1,317.9			
	Total	2,620.4	1,022.2	3,642.6			
1964	Catch	1,514.6	1,190.7	2,705.3	18	17	35
	Escapement	902.4	534.0	1,436.7			
	Total	2,417.0	1,724.7	4,141.7			
1965	Catch	2,331.4	474.7	2,806.1	43	35	78
	Escapement	789.9	245.5	1,035.4			
	Total	3,121.3	720.2	3,841.5			
1966	Catch	220.3	68.5	288.8	15	2	17
	Escapement	627.4	92.0	719.4			
	Total	847.7	160.5	1,008.2			
1967	Catch	53.1	4.2	57.3	11	10	21
	Escapement	327.3	118.2	445.5			
	Total	380.4	122.4	502.8			
1968	Catch	863.3	277.8	1,141.1	34	112	146
	Escapement	528.1	295.2	823.3			
	Total	1,391.4	573.0	1,964.4			
1969	Catch	862.8	265.3	1,128.1	68	23	91
	Escapement	1,906.2	568.7	2,474.9			
	Total	2,769	834.0	3,603.0			
1970	Catch	1,366.1	250.3	1,616.4	83	24	107
	Escapement	1,007.9	291.0	1,298.9			
	Total	2,374.0	541.3	2,915.3			
1971	Catch	1,212.1	214.0	1,426.1	15	9	24
	Escapement	488.0	214.7	702.7			
	Total	1,700.1	428.7	2,128.8			
1972	Catch	51.2	8.8	60.0	12	6	18
	Escapement	81.8	29.6	111.4			
	Total	133.0	38.4	171.4			

Table 30. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1973	Catch	35.1	1.2	36.3	12	10	22
	Escapement	85.7	25.1	110.8			
	Total	120.8	26.3	147.1			
1974	Catch	95.5	4.7	100.2	0	0	0
	Escapement	238.6	45.8	284.4			
	Total	334.1	50.5	384.6			
1975	Catch	30.4	26.3	56.7	3	2	5
	Escapement	357.8	194.3	552.1			
	Total	388.2	220.6	608.8			
1976	Catch	2,035.9	307.1	2,343.0	18	6	24
	Escapement	1,084.0	372.4	1,456.4			
	Total	3,119.9	679.5	3,799.4			
1977	Catch	1,163.4	280.2	1,443.6	3	2	5
	Escapement	2,168.5	509.3	2,677.8			
	Total	3,331.9	789.5	4,121.4			
1978	Catch	4,067.3	1,332.7	5,400.0	47	43	90
	Escapement	1,966.3	892.4	2,858.7			
	Total	6,033.6	2,225.1	8,258.7			
1979	Catch	4,845.0	1,562.6	6,407.6	57	106	163
	Escapement	2,125.1	504.4	2,629.5			
	Total	6,970.1	2,067.0	9,037.1			
1980	Catch	2,439.6	3,815.6	6,255.2	1,141	466	1,607
	Escapement	1,410.4	1,231.2	2,641.6			
	Total	3,850.0	5,046.8	8,896.8			
1981	Catch	4,196.4	378.5	4,574.9	332	129	461
	Escapement	1,875.0	431.8	2,306.8			
	Total	6,071.4	810.3	6,881.7			
1982	Catch	4,104.9	906.1	5,011.0	1,037	687	1,724
	Escapement	1,533.2	759.8	2,293.0			
	Total	5,638.1	1,665.9	7,304.0			
1983	Catch	2,245.8	526.8	2,772.6	40	15	55
	Escapement	639.2	212.0	851.2			
	Total	2,885.0	738.8	3,623.8			

Table 30. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1984	Catch	6,533.1	4,136.3	10,669.4	490	449	939
	Escapement	2,526.7	1,824.9	3,811.6			
	Total	9,059.8	5,421.2	14,481.0			
1985	Catch	3,324.8	999.9	4,324.7	72	37	109
	Escapement	1,229.3	384.5	1,613.8			
	Total	4,554.1	1,384.4	5,938.5			
1986	Catch	3,066.9	673.5	3,740.4	150	141	291
	Escapement	1,185.5	531.2	1,716.7			
	Total	4,252.4	1,204.7	5,457.1			
1987	Catch	1,143.4	48.1	1,191.5	11	6	17
	Escapement	1,304.4	236.1	1,540.5			
	Total	2,447.8	284.2	2,732.0			
1988	Catch	4,662.3	2,164.1	6,826.4	87	132	219
	Escapement	1,636.5	1,203.1	2,839.6			
	Total	6,298.8	3,367.2	9,666.0			

Table 31. SOUTH PENINSULA CHUM SALMON RUNS (In Thousands of Fish)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1962	Catch	409.5	155.3	564.8	199	61	260
	Escapement	238.6	160.8	399.4			
	Total	648.1	316.1	964.2			
1963	Catch	278.0	80.3	358.3	67	36	103
	Escapement	263.0	183.7	446.7			
	Total	541.0	264.0	805.0			
1964	Catch	378.8	153.3	532.1	153	67	220
	Escapement	160.8	294.0	454.8			
	Total	539.6	447.3	986.9			
1965	Catch	221.7	150.7	372.4	139	45	184
	Escapement	203.3	24.2	228.0			
	Total	425.0	175.4	600.4			
1966	Catch	221.4	36.0	257.4	220	17	237
	Escapement	(354.8)	67.2	422.0			
	Total	576.8	103.2	679.4			
1967	Catch	118.7	4.5	123.2	71	51	122
	Escapement	132.8	50.1	182.9			
	Total	251.5	54.6	306.1			
1968	Catch	121.4	47.6	169.0	105	51	156
	Escapement	191.7	87.4	279.1			
	Total	313.1	135.0	448.1			
1969	Catch	95.1	43.3	138.4	238	13	251
	Escapement	96.9	37.7	134.6			
	Total	192.0	81.0	273.0			
1970	Catch	482.4	87.2	569.6	363	49	412
	Escapement	171.7	108.8	280.5			
	Total	654.1	196.0	850.1			
1971	Catch	637.1	117.5	754.6	497	115	612
	Escapement	199.1	144.1	343.2			
	Total	836.2	261.6	1,097.8			
1972	Catch	150.6	55.9	206.5	413	108	521
	Escapement	145.0	109.5	254.5			
	Total	295.6	165.4	461.0			

Table 31. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1973	Catch	67.1	12.1	79.2	178	36	214
	Escapement	130.9	81.6	212.5			
	Total	198.0	93.7	291.7			
1974	Catch	56.6	15.3	71.9	0	0	0
	Escapement	169.8	87.5	257.3			
	Total	226.4	102.8	329.2			
1975	Catch	29.9	4.0	33.9	64	35	99
	Escapement	160.2	33.1	193.3			
	Total	190.1	37.1	227.2			
1976	Catch	109.4	25.1	134.5	326	72	398
	Escapement	225.3	101.9	327.2			
	Total	334.7	127.0	461.7			
1977	Catch	109.4	18.8	128.2	93	22	115
	Escapement	500.9	274.0	774.9			
	Total	610.3	292.8	903.1			
1978	Catch	341.6	139.8	481.4	47	18	65
	Escapement	386.2	214.3	600.5			
	Total	727.8	254.1	1,081.9			
1979	Catch	280.4	97.6	378.0	64	41	105
	Escapement	302.7	108.4	411.1			
	Total	583.1	206.0	789.1			
1980	Catch	654.2	169.1	823.3	457	71	528
	Escapement	241.6	120.8	362.4			
	Total	895.8	289.9	1,185.7			
1981	Catch	966.1	229.2	1,195.3	521	54	575
	Escapement	234.5	146.8	381.3			
	Total	1,200.6	376.0	1,576.6			
1982	Catch	922.9	253.8	1,176.7	935	160	1,095
	Escapement	203.0	183.9	386.9			
	Total	1,125.9	437.7	1,536.6			
1983	Catch	600.3	322.6	922.9	615	169	784
	Escapement	328.9	117.6	446.5			
	Total	929.2	440.2	1,369.4			

Table 31. (continued)

Year		(Not including June Migrants) Southeastern and South Central Districts	Southeastern and Unimak Districts	South Peninsula Totals	(June Migrants) South Unimak	Shumagins	Total
1984	Catch	832.9	486.5	1,319.4	228	109	337
	Escapement	446.0	253.7	699.7			
	Total	1,278.9	740.2	2,019.1			
1985	Catch	539.2	375.7	914.9	345	133	478
	Escapement	284.7	218.8	503.5			
	Total	823.9	594.5	1,418.4			
1986	Catch	981.2	417.4	1,398.6	252	99	351
	Escapement	239.6	305.0	544.6			
	Total	1,220.8	722.4	1,943.2			
1987	Catch	753.2	180.0	933.2	406	37	443
	Escapement	329.2	291.5	620.7			
	Total	1,082.4	471.5	1,553.9			
1988	Catch	826.2	552.3	1,378.5	465	62	527
	Escapement	269.1	227.3	496.4			
	Total	1,095.3	779.6	1,874.9			

Table 32. NORTH PENINSULA SALMON RUNS (In Thousands of Fish)

Year		Kings	Sockeyes	Cohos	Pinks	Chums
1962	Catch	5.4	249.7	35.2	31.2	34.9
	Escapement	4.4	351.2	-	4.0	150.9
	Total	9.8	600.9	-	35.2	185.8
1963	Catch	3.6	225.2	40.5	6.9	49.9
	Escapement	6.2	351.0	-	4.4	203.2
	Total	9.8	576.2	-	11.3	253.1
1964	Catch	3.6	250.8	36.6	6.8	139.0
	Escapement	25.9	419.9	-	(15.1)	156.1
	Total	29.5	670.7	-	(21.9)	295.1
1965	Catch	6.1	199.5	34.5	2.1	69.7
	Escapement	22.1	238.4	-	0.9	49.3
	Total	28.2	437.9	-	3.0	119.0
1966	Catch	5.6	245.3	37.3	16.0	82.8
	Escapement	8.2	283.3	-	2.0	149.5
	Total	13.8	528.6	-	18.0	232.3
1967	Catch	5.5	224.7	46.8	0.7	41.3
	Escapement	12.2	299.7	-	0.7	122.6
	Total	17.7	524.4	-	1.4	163.9
1968	Catch	4.5	237.1	64.9	0.2	73.5
	Escapement	15.8	251.3	-	26.5	250.8
	Total	20.3	488.4	-	26.7	324.3
1969	Catch	4.8	321.3	49.1	0.1	28.1
	Escapement	19.5	575.0	-	4.4	146.8
	Total	24.3	896.3	-	4.5	174.9
1970	Catch	3.2	213.0	26.4	7.8	50.2
	Escapement	8.3	451.5	-	11.1	169.8
	Total	11.5	664.5	-	18.9	220.0
1971	Catch	2.2	354.2	16.8	0.3	64.2
	Escapement	5.2	435.1	-	8.6	109.4
	Total	7.4	789.3	-	8.9	173.6
1972	Catch	1.8	179.5	8.0	0.0	84.7
	Escapement	5.0	190.2	-	1.3	124.0
	Total	6.8	369.7	-	1.3	208.7
1973	Catch	4.4	171.8	6.6	0.3	155.7
	Escapement	4.3	180.2	-	(0.2)	122.4
	Total	8.7	352.0	-	(0.5)	278.1

Table 32. (continued)

Year		Kings	Sockeye	Cohos	Pinks	Chums
1974	Catch	5.1	247.9	24.0	10.5	35.3
	Escapement	3.0	332.8	-	(23.0)	105.1
	Total	8.1	580.7	-	(33.5)	140.4
1975	Catch	2.1	233.5	28.2	0.3	8.7
	Escapement	4.6	516.8	-	0.6	109.2
	Total	6.7	750.3	-	0.9	117.9
1976	Catch	4.9	641.1	26.0	0.6	73.6
	Escapement	6.0	532.6	-	37.3	293.4
	Total	10.9	1,173.7	-	37.9	367.0
1977	Catch	5.5	471.1	34.1	0.9	129.1
	Escapement	7.1	541.1	-	8.5	681.2
	Total	12.6	1,012.2	-	9.4	810.3
1978	Catch	14.2	896.2	63.3	466.6	163.2
	Escapement	13.7	1,213.5	-	96.8	310.5
	Total	27.9	2,109.7	-	563.4	473.7
1979	Catch	17.1	1,979.5	112.3	5.0	65.7
	Escapement	15.8	1,574.0	-	9.3	305.3
	Total	32.9	3,553.5	-	14.3	371.0
1980	Catch	16.8	1,397.1	127.9	301.7	700.2
	Escapement	11.0	1,387.6	-	103.6	769.5
	Total	27.8	2,784.7	-	405.3	1,469.7
1981	Catch	18.3	1,844.9	155.4	11.2	706.8
	Escapement	12.4	1,347.9	-	6.1	535.2
	Total	30.7	3,192.8	-	17.3	1,242.0
1982	Catch	30.1	1,435.3	238.0	12.3	331.1
	Escapement	20.0	718.4	-	51.7	457.6
	Total	50.1	2,153.7	-	64.0	788.7
1983	Catch	29.5	2,093.4	75.1	3.4	348.7
	Escapement	25.7	580.3	-	4.0	392.6
	Total	55.2	2,673.7	-	7.4	741.3
1984	Catch	23.0	1,734.9	198.5	27.4	796.7
	Escapement	17.7	826.0	-	56.6	870.2
	Total	40.7	2,560.9	-	84.0	1,666.9
1985	Catch	23.5	2,600.5	167.8	3.1	671.1
	Escapement	12.9	898.1	-	1.4	344.2
	Total	36.4	3,498.6	-	4.5	1,015.3

Table 32. (continued)

Year		Kings	Sockeye	Cohos	Pinks	Chums
1986	Catch	11.7	2,463.7	164.1	22.6	271.2
	Escapement	8.7	580.3	-	13.3	243.6
	Total	20.4	3,044.0	-	35.9	514.8
1987	Catch	14.2	1,209.4	171.8	3.5	368.7
	Escapement	10.7	556.0	-	0.1	510.9
	Total	24.9	1,765.4	-	3.6	879.6
1988	Catch	16.8	1,528.1	234.0	65.2	393.5
	Escapement	11.7	614.9	(200-300)	43.5	500.3
	Total	28.5	2,143.0	(434-534)	108.7	893.8

Figures in parenthesis are very rough extrapolated estimates.

Table 33. NORTHERN DISTRICT KING SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0	0.4	0	0.5	0.7	3.7	0	5.3
	Escapement	0	(1.1)	0	0.5	0	2.7	(0.1)	4.4
	Total	**0**	**(1.5)**	**0**	**1.0**	**0.7**	**6.4**	**(0.1)**	**9.7**
1963	Catch	0	0	0	0.6	0.2	2.5	0	3.3
	Escapement	0	(0.1)	0	0.2	0	4.0	(1.9)	6.2
	Total	**0**	**(0.1)**	**0**	**0.8**	**0.2**	**6.5**	**(1.9)**	**9.5**
1964	Catch	0	0	0.1	0.3	0	3.3	0	3.7
	Escapement	5.8	4.2	0.5	3.0	0	8.4	4.0	25.9
	Total	**5.8**	**4.2**	**0.6**	**3.3**	**0**	**11.7**	**4.0**	**29.6**
1965	Catch	0	1.9	0.3	0.1	0	4.0	0	6.3
	Escapement	0.7	1.0	0	5.4	0	11.9	3.0	22.0
	Total	**0.7**	**2.9**	**0.3**	**5.5**	**0**	**15.9**	**3.0**	**28.3**
1966	Catch	0	0.7	0	0.1	0	2.4	0	3.2
	Escapement	0	(1.3)	0	(0.3)	0	4.7	1.9	8.2
	Total	**0**	**(2.0)**	**0**	**(0.4)**	**0**	**7.1**	**1.9**	**11.4**
1967	Catch	0	1.4	0	0.1	0.4	3.6	0	5.5
	Escapement	(0.8)	0.5	0.3	3.0	0	5.1	1.3	11.0
	Total	**(0.8)**	**1.9**	**0.3**	**3.1**	**0.4**	**8.7**	**1.3**	**16.5**
1968	Catch	0	1.0	0.1	0.3	1.3	2.8	0	5.5
	Escapement	0.3	(1.1)	0	2.6	0	7.3	2.7	14.0
	Total	**0.3**	**(2.1)**	**0.1**	**2.9**	**1.3**	**10.1**	**2.7**	**19.5**
1969	Catch	0	1.4	0	0.5	0.5	2.5	0	4.9
	Escapement	(0.8)	(1.1)	0	1.0	0	8.1	1.6	12.6
	Total	**(0.8)**	**(2.5)**	**0**	**1.5**	**0.5**	**10.6**	**1.6**	**17.5**
1970	Catch	0	0	0	0.2	0.4	2.6	0	3.2
	Escapement	0.2	0.3	0.3	1.0	0	2.9	2.0	6.7
	Total	**0.2**	**0.3**	**0.3**	**1.2**	**0.4**	**5.5**	**2.0**	**9.9**
1971	Catch	0	0	0.1	0.3	0.4	1.4	0	2.2
	Escapement	0.1	0.1	0.2	0.8	0	2.3	(1.5)	5.0
	Total	**0.1**	**0.1**	**0.3**	**1.1**	**0.4**	**3.7**	**(1.5)**	**7.2**
1972	Catch	0	0	0.1	0.2	0.2	1.3	0	1.8
	Escapement	0.7	1.6	0	0.1	0	1.4	1.0	4.8
	Total	**0.7**	**1.6**	**0.1**	**0.3**	**0.2**	**2.7**	**1.0**	**6.6**

Table 33. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	1.6	0	0.7	0.3	1.5	0	4.1
	Escapement	0.6	0.6	0	0.1	0	1.5	0.8	3.6
	Total	**0.6**	**2.2**	**0**	**0.8**	**0.3**	**3.0**	**0.8**	**7.7**
1974	Catch	0	2.5	0	0.2	0.2	2.1	0	5.0
	Escapement	0.5	0.7	0	0.3	0	1.1	0.4	3.0
	Total	**0.5**	**3.2**	**0**	**0.5**	**0.2**	**3.2**	**0.4**	**8.0**
1975	Catch	0	0.4	0	0.3	0.2	1.2	0	2.1
	Escapement	0.1	0.9	0	0.7	0	2.5	0.4	4.6
	Total	**0.1**	**1.3**	**0**	**1.0**	**0.2**	**3.7**	**0.4**	**6.7**
1976	Catch	0	1.5	0.1	0.5	0.6	2.2	0	4.9
	Escapement	1.6	0.2	0	0.5	0	3.3	0.4	6.0
	Total	**1.6**	**1.7**	**0.1**	**1.0**	**0.6**	**5.5**	**0.4**	**10.9**
1977	Catch	0	2.5	0.1	0.7	0.5	1.7	0	5.5
	Escapement	0.1	0.7	0	0	0	5.6	0.7	7.1
	Total	**0.1**	**3.2**	**0.1**	**0.7**	**0.5**	**7.3**	**0.7**	**12.6**
1978	Catch	0	9.5	0	0.6	0.7	3.4	0	14.2
	Escapement	1.1	4.2	0	(0.2)	0	4.2	4.0	13.7
	Total	**1.1**	**13.7**	**0**	**(0.8)**	**0.7**	**7.6**	**4.0**	**27.9**
1979	Catch	0	9.7	0	1.4	0.5	5.4	0	17.0
	Escapement	0.3	(3.2)	0	0	0	11.0	1.5	15.8
	Total	**0.3**	**(12.9)**	**0**	**1.4**	**0.5**	**16.4**	**1.5**	**32.8**
1980	Catch	0	5.4	0.1	1.7	0.9	8.7	0	16.8
	Escapement	(3.0)	(1.6)	0	0.1	0	5.5	0.8	(11.0)
	Total	**(3.0)**	**(7.0)**	**0.1**	**1.8**	**0.9**	**14.2**	**0.8**	(27.8)
1981	Catch	0	6.1	0	1.1	0.1	11.0	0	18.3
	Escapement	(3.0)	(1.0)	0	2.3	0	5.2	0.9	(12.4)
	Total	**(3.0)**	**(7.1)**	**0**	**3.4**	**0.1**	**16.2**	**0.9**	**(30.7)**
1982	Catch	0	11.0	0.9	2.9	0.6	13.5	1.2	30.1
	Escapement	(2.5)	(7.5)	0	0.9	0	7.0	2.1	20.0
	Total	**(2.5)**	**(18.5)**	**0.9**	**3.8**	**0.6**	**20.5**	**3.3**	**50.1**
1983	Catch	0	6.8	0.9	8.6	0.7	12.1	0.4	29.5
	Escapement	7.2	0.9	0	(1.5)	0	12.5	3.6	25.7
	Total	**7.2**	**7.7**	**0.9**	**(10.1)**	**0.7**	**24.6**	**4.0**	**55.2**

Table 33. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	6.4	1.3	6.0	0.6	7.8	0.8	22.9
	Escapement	0.4	7.4	0	0.6	0	6.3	3.0	17.7
	Total	**0.4**	**13.8**	**1.3**	**6.6**	**0.6**	**14.1**	**3.8**	**40.6**
1985	Catch	0	4.4	1.7	4.8	1.8	10.9	0	23.6
	Escapement	0.7	4.7	0	1.2	0	3.2	3.2	13.0
	Total	**0.7**	**9.1**	**1.7**	**6.0**	**1.8**	**14.1**	**3.2**	**36.6**
1986	Catch	0	1.8	1.5	2.9	0.4	4.8	0.2	11.6
	Escapement	1.7	2.4	0	0.8	0	1.8	2.1	8.8
	Total	**1.7**	**4.2**	**1.5**	**3.7**	**0.4**	**6.6**	**2.3**	**20.4**
1987	Catch	0	3.2	0.9	3.8	0.3	5.8	0.1	14.1
	Escapement	0.9	1.4	0	0.7	0	4.1	3.6	10.7
	Total	**0.9**	**4.6**	**0.9**	**4.5**	**0.3**	**9.9**	**3.7**	**24.8**
1988	Catch	0	5.8	0.8	3.5	0.2	6.5	0	16.8
	Escapement	0.4	2.2	0.2	1.2	0	3.3	3.3	10.6
	Total	**0.4**	**8.0**	**1.0**	**4.7**	**0.2**	**9.8**	**3.3**	**27.4**

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 34. Northwestern District Sockeye Salmon Runs (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	4.7	4.1	8.8
	Escapement	27.0	(24.0)	(51.0)
	Total	31.7	28.1	(59.8)
1963	Catch	1.7	5.2	6.9
	Escapement	40.0	14.0	54.0
	Total	41.7	19.2	60.9
1964	Catch	4.7	10.3	15.0
	Escapement	50.0	(20.0)	70.0
	Total	54.7	30.3	85.0
1965	Catch	0.4	14.1	14.5
	Escapement	7.0	6.9	13.9
	Total	7.4	21.0	28.4
1966	Catch	0.0	16.3	16.3
	Escapement	7.5	12.4	19.9
	Total	7.5	28.7	36.2
1967	Catch	8.1	5.3	13.4
	Escapement	9.0	5.8	14.8
	Total	17.1	11.1	28.2
1968	Catch	11.1	4.6	15.7
	Escapement	10.0	7.8	17.8
	Total	21.1	12.4	33.5
1969	Catch	6.1	3.5	9.6
	Escapement	14.0	39.5	53.5
	Total	20.1	43.0	63.1
1970	Catch	3.1	0.7	3.8
	Escapement	7.0	(35.0)	(42.0)
	Total	10.1	(35.7)	(45.8)
1971	Catch	6.9	2.4	9.3
	Escapement	4.0	30.0	34.0
	Total	10.9	32.4	43.3
1972	Catch	0.8	6.2	7.0
	Escapement	5.0	4.8	9.8
	Total	5.8	11.0	16.8

Table 34. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	1.2	2.6	3.8
	Escapement	2.0	5.0	7.0
	Total	3.2	7.6	10.8
1974	Catch	4.7	3.6	8.3
	Escapement	4.0	3.3	7.3
	Total	8.7	6.9	15.6
1975	Catch	1.5	1.5	3.0
	Escapement	7.0	12.3	19.3
	Total	8.5	13.8	22.3
1976	Catch	19.0	1.7	20.7
	Escapement	14.0	21.5	35.5
	Total	33.0	23.2	56.2
1977	Catch	3.1	31.5	34.6
	Escapement	26.5	28.6	55.1
	Total	29.6	60.1	89.7
1978	Catch	15.6	24.5	40.1
	Escapement	17.0	28.0	45.0
	Total	32.6	52.5	85.1
1979	Catch	10.8	63.1	73.9
	Escapement	9.0	33.7	42.7
	Total	19.8	96.8	116.6
1980	Catch	34.2	15.2	49.4
	Escapement	11.5	90.1	101.6
	Total	45.7	105.3	151.0
1981	Catch	30.9	20.1	51.0
	Escapement	12.0	60.7	72.7
	Total	42.9	80.8	123.7
1982	Catch	24.5	9.3	33.8
	Escapement	21.5	29.3	50.8
	Total	46.0	38.6	84.6
1983	Catch	15.2	14.3	29.5
	Escapement	18.5	14.2	32.7
	Total	33.7	28.5	62.2

Table 34. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1984	Catch	4.7	197.0	201.7
	Escapement	19.1	70.3	89.4
	Total	23.8	267.3	291.1
1985	Catch	6.2	77.4	83.6
	Escapement	17.2	29.5	46.7
	Total	23.4	106.9	130.3
1986	Catch	19.1	139.2	158.3
	Escapement	15.7	45.7	61.4
	Total	34.8	184.9	219.7
1987	Catch	6.5	137.9	144.4
	Escapement	13.6	36.3	49.9
	Total	20.1	174.2	194.3
1988	Catch	11.5	67.0	78.5
	Escapement	17.3	35.6	52.9
	Total	28.8	102.6	131.4

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 35. NORTHERN DISTRICT SOCKEYE SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0.9	17.8	9.7	142.9	0	69.6	0	240.9
	Escapement	5.0	(19.0)	5.9	215.0	0.1	54.2	1.0	300.2
	Total	5.9	(36.8)	15.6	357.9	0.1	123.8	1.0	541.1
1963	Catch	0	0	26.6	120.0	0	71.5	0	218.1
	Escapement	1.4	(14.2)	10.4	238.6	0.1	31.0	(1.3)	297.0
	Total	1.4	(14.2)	37.0	358.6	0.1	102.5	(1.3)	515.1
1964	Catch	0	6.3	33.3	107.5	0	88.7	0	235.8
	Escapement	1.5	10.0	(6.5)	250.2	0.2	80.0	1.5	349.9
	Total	1.5	16.3	(39.8)	357.7	0.2	168.7	1.5	585.7
1965	Catch	0	9.7	58.4	62.4	0.1	53.8	0	184.4
	Escapement	7.5	30.0	(12.5)	137.0	0	37.0	0.5	224.5
	Total	7.5	39.7	(70.9)	199.4	0.1	90.8	0.5	408.9
1966	Catch	0	8.0	11.0	152.6	0	60.0	0	231.6
	Escapement	3.0	(11.7)	24.3	185.0	0.6	36.5	2.3	263.4
	Total	3.0	(19.7)	35.3	337.6	0.6	96.5	2.3	495.0
1967	Catch	0	3.1	0	156.1	12.5	40.2	0	211.9
	Escapement	(3.8)	(12.0)	26.4	200.0	0.2	42.0	(0.5)	284.9
	Total	(3.8)	(15.1)	26.4	356.1	12.7	82.2	(0.5)	496.8
1968	Catch	0	0	78.6	90.5	3.4	51.1	0	223.6
	Escapement	4.1	(15.0)	(15.0)	166.0	0.4	31.0	(2.0)	233.5
	Total	4.1	(15.0)	(93.6)	256.5	3.8	82.1	(2.0)	457.1
1969	Catch	0	5.2	24.0	205.5	4.4	72.8	0	311.9
	Escapement	(3.8)	(15.0)	(15.6)	406.0	0.1	78.5	(2.5)	521.5
	Total	(3.8)	(20.2)	(39.6)	611.5	4.5	151.3	(2.5)	833.4
1970	Catch	0	0	44.8	110.0	1.7	52.7	0	209.2
	Escapement	1.5	14.1	16.1	294.0	0	82.4	1.4	409.5
	Total	1.5	14.1	60.9	404.0	1.7	135.1	1.4	618.7
1971	Catch	0	0	57.1	238.6	1.7	47.5	0	344.9
	Escapement	2.0	30.8	26.5	281.0	0.2	60.1	0.5	401.1
	Total	2.0	30.8	83.6	519.6	1.9	107.6	0.5	746.0
1972	Catch	0	0	12.0	136.2	1.1	23.2	0	172.5
	Escapement	0.4	3.5	13.1	135.4	0	28.0	0	180.4
	Total	0.4	3.5	25.1	271.6	1.1	51.2	0	352.9

Table 35. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	1.5	21.5	117.3	4.2	23.9	0	168.4
	Escapement	1.2	7.2	16.0	130.1	0	18.7	0	173.2
	Total	1.2	8.7	37.5	247.4	4.2	42.6	0	341.6
1974	Catch	0	2.5	47.0	140.9	7.7	25.2	0	223.3
	Escapement	1.3	1.4	14.6	266.5	0	39.9	1.8	325.5
	Total	1.3	3.9	61.6	407.4	7.7	65.1	1.8	548.8
1975	Catch	0	0.6	8.7	166.0	3.7	51.5	0	230.5
	Escapement	0.9	5.1	40.8	310.0	0.1	138.6	2.0	497.5
	Total	0.9	5.7	49.5	476.0	3.8	190.1	2.0	728.0
1976	Catch	0	5.0	219.7	310.9	9.9	74.9	0	620.4
	Escapement	6.3	30.3	15.7	328.0	0.5	108.9	7.4	497.1
	Total	6.3	35.3	235.4	638.9	10.4	183.8	7.4	1,117.5
1977	Catch	0	3.4	97.0	268.7	11.0	56.4	0	436.5
	Escapement	3.9	23.6	20.7	265.2	13.5	155.0	4.1	486.5
	Total	3.9	27.0	117.7	533.9	24.5	211.4	4.1	922.5
1978	Catch	0	0.8	32.2	556.4	53.7	213.4	0	856.5
	Escapement	3.8	18.8	21.2	814.0	4.9	304.3	1.5	1,168.5
	Total	3.8	19.6	53.4	1,370.4	58.6	517.7	1.5	2,025.0
1979	Catch	0.1	36.9	194.4	1,320.9	32.1	320.9	0	1,905.3
	Escapement	6.0	(46.7)	97.5	1,013.0	5.0	360.1	3.0	1,531.3
	Total	6.1	(83.6)	291.9	2,333.9	37.1	681.0	3.0	3,436.6
1980	Catch	0	24.6	252.2	741.9	10.5	318.5	0	1,347.7
	Escapement	30.0	(47.0)	(100.0)	751.0	1.5	352.6	3.9	1,286.0
	Total	30.0	(71.6)	(352.2)	1,492.9	12.0	671.1	3.9	2,633.7
1981	Catch	0	3.8	68.9	1,327.8	18.6	374.7	0	1,793.8
	Escapement	100.0	(26.6)	(151.0)	741.5	0.6	251.0	(4.0)	1,274.7
	Total	100.0	(30.4)	(219.0)	2,069.3	19.2	625.7	(4.0)	3,068.5
1982	Catch	0	8.8	142.5	1,009.3	11.3	229.2	0.4	1,401.5
	Escapement	(13.0)	(62.0)	(43.0)	361.3	0.5	179.6	6.0	665.4
	Total	(13.0)	(70.8)	(185.5)	1,370.6	11.8	408.8	6.4	2,066.9
1983	Catch	0.1	0.1	729.6	1,126.2	15.0	192.9	0	2,063.9
	Escapement	9.0	8.6	40.1	358.0	0.5	128.8	2.6	547.6
	Total	9.1	8.7	769.7	1,484.2	15.5	321.7	2.6	2,611.5

Table 35. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	1.7	743.7	637.4	31.4	118.8	0	1,533.0
	Escapement	16.0	31.1	22.3	414.0	0.7	251.0	0.6	735.7
	Catch	16.0	32.8	766.0	1,051.4	32.1	369.8	0.6	2,268.7
1985	Catch	0.3	5.1	978.2	822.5	4.5	706.3	0	2,516.9
	Escapement	12.6	45.5	22.7	451.5	0.7	314.8	3.7	851.5
	Total	12.9	50.6	1,000.9	1,274.0	5.2	1,021.1	3.7	3,368.4
1986	Catch	0.7	38.0	1,148.8	938.2	1.3	178.4	0	2,305.4
	Escapement	25.7	26.4	66.9	279.4	0.3	117.9	2.3	518.9
	Total	26.4	64.4	1,215.7	1,217.6	1.6	296.3	2.3	2,824.3
1987	Catch	0.2	2.3	719.3	214.0	0.7	128.5	0.1	1,065.1
	Escapement	15.3	28.3	30.7	266.7	0.7	155.7	8.7	506.1
	Total	15.5	30.6	750.0	480.7	1.4	284.2	8.8	1,571.2
1988	Catch	0	10.6	753.6	495.0	3.9	186.6	0	1,449.7
	Escapement	2.0	35.9	26.9	347.5	0.4	142.5	6.9	562.1
	Total	2.0	46.5	780.5	842.5	4.3	329.1	6.9	2,011.8

Figures in parenthesis are extrapolated estimates. Except for Bear and Nelson Rivers where weir and tower counts are used, escapements are indexed totals.

Table 36. 1979-1988 NORTH PENINSULA COHO SALMON CATCHES BY DISTRICT AND SECTION (Numbers of Fish in Thousands)

SECTION	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
Dublin Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Urilia Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	7.6	4.8
Swanson Lagoon	6.5	0.0	0.5	0.0	0.7	12.7	26.2	22.0	8.3	12.3
Bechevin Bay	0.0	0.1	0.0	0.1	0.7	0.4	1.4	0.0	0.8	0.1
Izenbek-Moffet Bay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	3.0
Northwestern District Total	6.5	0.1	0.5	0.1	1.4	13.1	27.6	25.3	19.6	20.2
Black Hills	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Caribou Flats	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Nelson Lagoon	80.0	80.3	133.5	170.7	64.0	113.3	88.2	99.3	83.7	95.4
Herendeen-Moller B.	0.1	0.1	0.1	0.4	0.4	0.7	0.5	0.0	0.0	0.0
Bear River	1.9	4.9	4.6	11.6	4.2	10.6	15.0	11.3	5.0	15.7
Three Hills	0.1	0.0	0.0	0.2	0.0	3.0	1.4	1.9	2.1	3.3
Ilnik	0.0	0.4	0.0	13.1	2.7	6.2	6.2	5.4	21.3	35.0
Inner Port Heiden	16.2	13.3	3.8	18.7	1.7	21.6	15.4	19.4	27.5	27.3
Outer Port Heiden	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.0	8.6
Cinder River	8.0	28.6	12.9	23.4	0.7	30.0	13.5	0.3	12.6	28.5
Northern District Total	106.3	127.6	154.9	238.1	73.7	185.4	140.2	138.8	152.2	213.8
NORTH PENINSULA TOTAL	**112.8**	**127.7**	**155.4**	**238.2**	**75.1**	**198.5**	**167.8**	**164.1**	**171.8**	**234.0**

Table 37. NORTHWESTERN DISTRICT PINK SALMON RUNS (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	0	30.8	30.8
	Escapement	0	4.0	4.0
	Total	0	34.8	34.8
1963	Catch	0	6.0	6.0
	Escapement	0	4.4	4.4
	Total	0	10.4	10.4
1964	Catch	0.1	6.7	6.8
	Escapement	0	(15.0)	(15.0)
	Total	0.1	21.7	21.8
1965	Catch	0	2.0	2.0
	Escapement	0	0.9	0.9
	Total	0	2.9	2.9
1966	Catch	0	16.0	16.0
	Escapement	0.4	1.3	1.7
	Total	0.4	17.3	17.7
1967	Catch	0	0.3	0.3
	Escapement	0.2	0.5	0.7
	Total	0.2	0.8	1.0
1968	Catch	0	0	0
	Escapement	1.5	25.0	26.5
	Total	1.5	25.0	26.5
1969	Catch	0	0	0
	Escapement	2.3	2.1	4.4
	Total	2.3	2.1	4.4
1970	Catch	0	7.8	7.8
	Escapement	0	11.1	11.1
	Total	0	18.9	18.9
1971	Catch	0	0.3	0.3
	Escapement	0.1	8.4	8.5
	Total	0.1	8.7	8.8
1972	Catch	0	0	0
	Escapement	0	1.2	1.2
	Total	0	1.2	1.2

Table 37. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	0	0	0
	Escapement	0	(0.2)	(0.2)
	Total	0	(0.2)	(0.2)
1974	Catch	0	10.3	10.3
	Escapement	0	(23.0)	(23.0)
	Total	0	(33.3)	(33.3)
1975	Catch	0.0	0.0	0.0
	Escapement	0.1	0.5	0.6
	Total	0.1	0.5	0.6
1976	Catch	0	0	0
	Escapement	0.1	37.2	37.3
	Total	0.1	37.2	37.3
1977	Catch	0	0	0
	Escapement	0.2	6.2	6.4
	Total	0.2	6.2	6.4
1978	Catch	2.2	465.6	467.8
	Escapement	0	90.4	90.4
	Total	2.2	556.0	558.2
1979	Catch	0	1.6	1.6
	Escapement	0	9.3	9.3
	Total	0	10.9	10.9
1980	Catch	0	297.9	297.9
	Escapement	0	94.0	94.0
	Total	0	391.9	391.9
1981	Catch	0	9.1	9.1
	Escapement	0	5.7	5.7
	Total	0	14.8	14.8
1982	Catch	0	5.1	5.1
	Escapement	0.2	51.5	51.7
	Total	0.2	56.6	56.8
1983	Catch	0	*1.3	1.3
	Escapement	0	3.9	3.9
	Total	0	5.2	5.2

Table 37. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1984	Catch	0.1	9.7	9.8
	Escapement	0.0	33.0	33.0
	Total	0.1	42.7	42.8
1985	Catch	0	2.0	2.0
	Escapement	0	1.4	1.4
	Total	0	3.4	3.4
1986	Catch	0	9.9	9.9
	Escapement	0	12.9	12.9
	Total	0	22.8	22.8
1987	Catch	0	0.8	0.8
	Escapement	0	1.1	1.1
	Total	0	1.9	1.9
1988	Catch	1.2	29.0	30.2
	Escapement	1.8	26.7	28.5
	Total	3.0	55.7	58.7

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 38. NORTHWESTERN DISTRICT CHUM SALMON RUNS (In Thousands of Fish)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1962	Catch	6.2	8.5	14.7
	Escapement	68.0	48.0	116.5
	Total	74.2	57.0	131.2
1963	Catch	3.2	41.3	44.5
	Escapement	133.5	22.3	155.8
	Total	136.7	63.6	200.3
1964	Catch	60.2	25.7	85.9
	Escapement	95.5	(16.0)	111.5
	Total	155.7	41.7	197.4
1965	Catch	4.7	44.6	49.3
	Escapement	24.0	(1.8)	25.8
	Total	28.7	46.4	75.1
1966	Catch	8.9	47.2	56.1
	Escapement	54.0	10.0	64.0
	Total	62.9	57.2	120.1
1967	Catch	9.9	8.9	18.8
	Escapement	32.8	15.4	48.2
	Total	42.7	24.3	67.0
1968	Catch	48.8	0.2	49.0
	Escapement	142.7	19.8	162.5
	Total	191.5	20.0	211.5
1969	Catch	4.5	1.4	5.9
	Escapement	95.3	8.0	103.3
	Total	99.8	9.4	109.2
1970	Catch	10.0	2.5	12.5
	Escapement	58.1	(5.6)	63.7
	Total	68.1	8.1	76.2
1971	Catch	36.3	7.5	43.8
	Escapement	54.1	5.9	60.0
	Total	90.4	13.4	103.8
1972	Catch	57.9	1.5	59.4
	Escapement	65.8	11.2	77.0
	Total	123.7	12.7	136.4

Table 38. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1973	Catch	96.6	6.5	103.1
	Escapement	68.1	(7.5)	75.6
	Total	164.7	(14.0)	178.7
1974	Catch	11.2	3.0	14.2
	Escapement	76.0	(6.1)	82.1
	Total	87.2	9.1	96.3
1975	Catch	3.4	0.5	3.9
	Escapement	74.3	17.3	91.6
	Total	77.7	17.8	95.5
1976	Catch	38.1	7.9	46.0
	Escapement	127.7	38.3	166.0
	Total	165.8	46.2	212.0
1977	Catch	20.3	22.6	42.9
	Escapement	381.4	54.3	435.7
	Total	401.7	76.9	478.6
1978	Catch	82.3	48.4	130.7
	Escapement	134.1	29.5	163.6
	Total	216.4	77.9	294.3
1979	Catch	17.8	12.5	30.3
	Escapement	178.0	12.4	190.4
	Total	195.8	24.9	220.7
1980	Catch	282.5	85.0	367.5
	Escapement	364.2	41.1	405.3
	Total	646.7	126.1	772.8
1981	Catch	296.4	59.1	355.5
	Escapement	235.0	29.6	264.6
	Total	531.4	88.7	620.1
1982	Catch	57.5	37.7	95.2
	Escapement	166.4	23.8	190.2
	Total	223.9	61.5	285.4

Table 38. (continued)

Year		Izembek - Moffet Bay	Bechevin, Swanson Lagoon & Urilia Bays	Northwestern District Total
1983	Catch	154.8	14.9	169.7
	Escapement	173.3	20.2	193.5
	Total	328.1	35.1	363.2
1984	Catch	102.7	79.8	182.5
	Escapement	427.5	33.4	460.9
	Total	530.2	113.2	643.4
1985	Catch	126.6	116.5	243.1
	Escapement	194.7	25.7	220.4
	Total	321.3	142.2	463.5
1986	Catch	69.1	44.5	113.6
	Escapement	142.4	23.3	165.7
	Total	211.5	67.8	279.3
1987	Catch	148.6	64.6	213.2
	Escapement	286.0	55.5	341.2
	Total	434.6	120.1	554.7
1988	Catch	112.2	66.1	178.3
	Escapement	304.4	51.8	356.2
	Total	416.6	117.9	534.5

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 39. NORTHERN DISTRICT CHUM SALMON RUNS (In Thousands of Fish)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1962	Catch	0.2	8.6	0.6	7.0	0	3.7	0	20.1
	Escapement	0.5	(1.9)	(1.5)	1.5	18.3	9.7	(1.0)	34.4
	Total	0.7	(10.5)	(2.1)	8.5	18.3	13.4	(1.0)	54.5
1963	Catch	0	0	0.7	0.6	0	4.1	0	5.4
	Escapement	1.2	(7.4)	(1.5)	(3.0)	26.0	7.0	(1.3)	47.4
	Total	1.2	(7.4)	(2.2)	(3.6)	26.0	11.1	(1.3)	52.8
1964	Catch	0	0	2.3	6.5	39.8	3.4	0	52.0
	Escapement	0.2	1.0	(1.5)	3.0	35.9	2.0	(1.0)	44.6
	Total	0.2	1.0	(3.8)	9.5	75.7	5.4	(1.0)	96.6
1965	Catch	0	0.8	2.3	1.5	13.6	2.2	0	20.4
	Escapement	0	8.5	(1.5)	1.0	8.0	4.0	(0.5)	23.5
	Total	0	9.3	(3.8)	2.5	21.6	6.2	(0.5)	43.9
1966	Catch	0	0	0.3	3.7	17.9	4.8	0	26.7
	Escapement	4.4	(3.4)	(1.5)	1.0	56.2	17.0	2.0	85.5
	Total	4.4	(3.4)	(1.8)	4.7	74.1	21.8	2.0	112.2
1967	Catch	0	0	0	13.6	2.4	5.1	0	21.1
	Escapement	2.5	3.0	9.6	2.5	25.0	29.8	(2.0)	74.4
	Total	2.5	3.0	9.6	16.1	27.4	34.9	(2.0)	95.5
1968	Catch	0	0	3.1	7.5	10.5	3.5	0	24.6
	Escapement	0	(11.0)	0	9.5	47.7	18.1	2.0	88.3
	Total	0	(11.0)	3.1	17.0	58.2	21.6	2.0	112.9
1969	Catch	0	1.2	1.3	10.3	7.8	3.5	0	24.1
	Escapement	2.5	(11.0)	(1.5)	1.0	14.0	13.0	0.5	43.5
	Total	2.5	(12.2)	(2.8)	11.3	21.8	16.5	0.5	67.6
1970	Catch	0	0	3.2	14.6	12.2	1.5	0	31.5
	Escapement	1.3	22.0	0.5	2.0	42.8	36.0	(1.5)	106.1
	Total	1.3	22.0	3.7	16.6	55.0	37.5	(1.5)	137.6
1971	Catch	0	0	2.5	12.9	1.2	3.8	0	20.4
	Escapement	2.5	12.1	0.8	0	14.5	19.0	(0.5)	49.4
	Total	2.5	12.1	3.3	12.9	15.7	22.8	(0.5)	69.8
1972	Catch	0	0	0.8	14.0	7.3	3.2	0	25.3
	Escapement	5.3	12.2	0.5	3.7	8.0	16.8	(0.5)	47.0
	Total	5.3	12.2	1.3	17.7	15.3	20.0	(0.5)	72.3

Table 39. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1973	Catch	0	2.5	0.9	34.2	13.2	1.8	0	52.6
	Escapement	0.6	22.8	0.8	0.8	3.7	12.7	0	46.8
	Total	0.6	25.3	1.7	35.0	16.9	14.5	0	99.4
1974	Catch	0	1.0	1.3	11.4	3.2	0.5	0	17.4
	Escapement	4.6	4.5	0	1.5	3.7	8.3	0.4	23.0
	Total	4.6	5.5	1.3	12.9	6.9	8.8	0.4	40.4
1975	Catch	0	0	0.1	3.8	0.2	0.7	0	4.8
	Escapement	0.3	1.5	2.0	2.0	7.3	4.5	0	17.6
	Total	0.3	1.5	2.1	5.8	7.5	5.2	0	22.4
1976	Catch	0	1.1	2.9	12.3	5.5	5.8	0	27.6
	Escapement	1.9	30.7	5.7	18.0	28.5	42.5	0.1	127.4
	Total	1.9	31.8	8.6	30.3	34.0	48.3	0.1	155.0
1977	Catch	0	0	7.1	32.3	34.8	10.7	0	84.9
	Escapement	(1.7)	32.0	(1.5)	17.0	108.5	83.3	1.5	245.5
	Total	(1.7)	32.0	(8.6)	49.3	143.3	94.0	1.5	330.4
1978	Catch	0	0	1.2	14.6	6.6	10.3	0	32.7
	Escapement	7.4	22.0	(1.5)	(15.5)	89.3	10.2	(1.0)	146.9
	Total	7.4	22.0	(2.7)	(30.1)	95.9	20.5	(1.0)	179.6
1979	Catch	0	0.8	0.7	17.4	10.9	5.7	0	35.5
	Escapement	(3.6)	(32.7)	0	7.0	30.6	37.0	4.0	114.9
	Total	(3.6)	(33.5)	0.7	24.4	41.5	42.7	4.0	150.4
1980	Catch	0	2.6	29.7	161.7	59.6	80.1	0	333.7
	Escapement	(10.0)	(33.7)	(10.0)	20.0	116.1	164.0	10.4	364.2
	Total	(10.0)	(36.3)	(39.7)	181.7	175.7	244.1	10.4	697.9
1981	Catch	0	0.2	7.1	155.0	126.2	62.8	0	351.3
	Escapement	(11.8)	(73.4)	(11.0)	27.2	85.0	57.0	(11.0)	276.4
	Total	(11.8)	(73.6)	(18.1)	182.2	211.2	119.8	(11.0)	627.7
1982	Catch	0	0.7	21.2	142.4	50.2	21.4	0.1	236.0
	Escapement	(5.5)	(35.5)	1.0	42.4	152.0	29.1	(2.0)	267.5
	Total	(5.5)	(36.2)	22.2	184.8	202.2	50.5	(2.1)	503.5
1983	Catch	0	0	26.1	87.7	51.3	14.0	0	179.1
	Escapement	17.2	14.5	11.2	(15.0)	126.0	14.0	1.2	199.1
	Total	17.2	14.5	37.3	(102.7)	177.3	28.0	1.2	378.2

Table 39. (continued)

Year		Cinder River	Port Heiden	Three Hills & Ilnik	Bear River	Herendeen-Moller Bay	Nelson Lagoon	Caribou Flats & Black Hills	Northern District Totals
1984	Catch	0	0.2	174.2	242.3	119.2	78.4	0	614.3
	Escapement	13.0	85.0	4.0	7.0	241.3	49.0	10.0	409.3
	Total	13.0	85.2	178.2	249.3	360.5	127.4	10.0	1,023.6
1985	Catch	0	0	86.6	68.3	266.4	6.6	0	427.9
	Escapement	3.2	26.5	0.2	5.2	71.7	13.0	4.1	123.9
	Total	3.2	26.5	86.8	73.5	338.1	19.6	4.1	551.8
1986	Catch	0.1	0.8	38.7	86.7	27.8	3.6	0	157.7
	Escapement	2.2	12.0	0.0	6.4	55.8	0.8	0.7	77.9
	Total	2.3	12.8	38.7	93.1	83.6	4.4	0.7	235.6
1987	Catch	0	1.0	48.0	85.5	14.2	6.7	0	155.4
	Escapement	12.4	55.4	0.1	5.0	88.6	5.2	4.7	171.4
	Total	12.4	56.4	48.1	90.5	102.8	11.9	4.7	326.8
1988	Catch	0	4.8	48.2	73.7	75.8	12.6	0	215.1
	Escapement	5.3	41.6	0.1	3.0	76.5	11.0	6.6	144.1
	Total	5.3	46.4	48.3	76.7	152.3	23.6	6.6	359.2

Figures in parenthesis are extrapolated estimates. Escapements are indexed totals.

Table 40. NELSON LAGOON SALMON RUNS (Fish in Thousands)

	KINGS			SOCKEYES			CHUMS			COHO
Year	Escapement	Catch	Total	Escapement	Catch	Total	Escapement	Catch	Total	Catches
1960	-	5.4	-	48.0	93.5	141.5	15.0	16.3	31.3	31.4
1961	0.3	3.7	4.0	138.2	76.8	215.0	10.1	1.9	12.0	20.3
1962	2.7	3.7	6.4	54.2	69.6	123.8	9.7	3.7	13.4	30.0
1963	4.0	2.5	6.5	31.0	71.5	102.5	7.0	4.1	11.1	33.4
1964	8.4	3.3	11.7	80.0	88.7	168.7	2.0	3.4	5.4	30.2
1965	11.9	4.0	15.9	37.0	53.8	90.8	4.0	2.2	6.2	28.4
1966	4.7	2.4	7.1	36.5	60.0	96.5	17.0	4.8	21.8	27.6
1967	5.1	3.6	8.7	42.0	40.2	82.2	29.8	5.1	34.9	34.8
1968	7.3	2.8	10.1	31.0	51.1	82.1	18.1	3.5	21.6	55.9
1969	8.1	2.5	10.6	78.5	72.8	151.3	13.0	1.5	14.5	34.3
1970	2.9	2.6	5.5	82.4	52.7	135.1	36.0	7.7	43.7	24.7
1971	2.3	1.4	3.7	60.1	47.5	107.6	19.0	3.8	22.8	6.9
1972	1.4	1.3	2.7	28.0	23.2	51.2	16.8	3.2	20.0	7.3
1973	1.5	1.5	3.0	18.7	23.9	42.6	12.7	1.8	14.5	16.6
1974	1.1	2.1	3.2	39.9	25.2	65.1	8.3	0.5	8.8	15.8
1975	2.5	1.2	3.7	138.6	51.5	190.1	4.5	0.7	5.2	21.3
1976	3.3	2.2	5.5	108.9	74.9	183.8	42.5	5.8	48.3	19.3
1977	5.6	1.7	7.3	155.0	56.4	211.4	83.3	10.7	94.0	22.3
1978	4.2	3.4	7.6	304.3	213.4	517.7	10.2	10.3	20.5	30.9
1979	11.0	5.4	16.4	360.1	320.9	681.0	37.0	5.7	42.7	80.0
1980	5.5	8.7	14.2	352.6	318.5	671.1	164.0	80.1	244.1	80.3
1981	5.2	11.0	16.2	251.0	374.7	625.7	57.0	62.8	119.8	133.5
1982	7.0	13.5	20.5	179.6	229.2	408.8	29.1	21.4	50.5	170.7
1983	12.5	12.1	24.6	128.8	192.9	321.7	14.0	14.0	28.0	64.0
1984	6.3	7.8	14.1	251.0	118.8	369.8	49.0	78.4	127.4	113.3
1985	3.2	10.9	14.1	318.5	706.3	1024.8	13.0	6.6	19.6	88.2
1986	1.8	4.8	6.6	117.9	178.4	296.3	1.8	3.6	5.4	99.3
1987	4.1	5.8	9.9	155.7	128.5	284.2	5.2	6.7	11.9	83.7
1988	3.3	6.5	9.8	142.5	186.6	329.1	11.0	12.6	23.6	95.4

Table 41. DAILY NELSON LAGOON SECTION KING SALMON CATCHES 1979-88 (ALL GEAR)

Date	1979 Boats	1979 Catch	1980 Boats	1980 Catch	1981 Boats	1981 Catch	1982 Boats	1982 Catch	1983 Boats	1983 Catch
May 30										
31							5	151		
June 1							5	97		
2							10	159	1	25
3							1	2		
4										
5										
6									9	297
7							17	793	11	309
8							10	400	12	305
9							8	345	11	255
10							9	296		
11					17	1,513				
12					20	1,597				
13	13	1,078							14	1,164
14	13	668					5	96	14	616
15	15	319			20	788	18	778	11	397
16			19	1,813	12	549	23	965	13	579
17			17	786	19	858	22	776		
18	18	236	18	696	20	1,031	22	904		
19	17	358	16	378	18	765				
20	18	393	13	413					15	672
21	22	344					18	885	15	187
22	23	175			23	584	13	604	17	727
23	22	169	21	282	22	461	22	909	18	911
24	21	179	25	658	20	331	21	575	17	866
25	15	157	23	486	19	241	21	457		
26	22	357	25	439	23	308				
27	17	227	19	225	17	254			24	701
28	18	143	23	353	20	219	21	360	25	833
29	11	50	25	448	9	33	25	427	24	489
30	19	71	25	270	24	309	29	557	22	369
July 1	22	66	27	143	18	162	26	410		
2	15	12	17	85	11	12	25	475		
3	25	24	23	174	24	135				
4	17	13	12	57	20	148			23	227
5	19	65	23	114	20	47	28	253	24	369
6	16	38	23	115	14	89	30	257	23	269
7	19	8	23	120	27	119	26	258	24	191
8	20	95	22	108	26	138	25	100	22	176
9	13	18	24	156	26	86				
10	21	27	6	47	12	23				
11	15	6	8	37	22	58			18	78
12	16	9	9	22	15	36	24	50	21	90
13	17	23	15	129	15	19	26	99	22	53
14	11	19	15	34	18	28	23	60	20	37
15	18	6	13	45	10	5	23	50	17	13
SEASON TOTAL		5,399		8,706		10,981		13,488		12,055

Table 41. (continued)

Date	1984 Boats	1984 Catch	1985 Boats	1985 Catch	1986 Boats	1986 Catch	1987 Boats	1987 Catch	1988 Boats	1988 Catch
May 30									1	7
31										
June 1							17	136		
2							10	94		
3			6	43	6	20	6	61		
4	8	95	4	29	6	10	4	31		
5	11	68	4	12	18	270				
6	3	20	6	88					18	296
7	6	23							14	160
8							1	32	14	70
9					12	158	3	41		
10			17	694	10	137	22	502		
11	15	208	3	52	19	191	19	285		
12	15	223	7	100	18	106				
13	10	82	9	119					5	72
14	18	212							4	80
15							24	1,086	11	280
16					2	78			10	340
17			22	821	22	486	23	363		
18	13	396	19	692	26	279	22	358		
19	15	431	18	447	24	333				
20			20	390	27	334			28	721
21			22	499	24	250			25	595
22			19	427	22	157	24	672	24	455
23			17	461	25	330	22	599	27	654
24			29	520	25	277	21	189		
25	12	44	24	321	25	291	26	249		
26	7	8	21	427	26	144				
27	5	3	19	303					29	856
28			20	317					29	599
29							28	251	22	345
30					25	121	30	239	32	295
July 1			31	905	32	264	27	128	22	193
2	10	149	6	230	31	183	31	138		
3	10	83	28	585	27	130				
4			22	324					33	116
5			16	269					26	102
6			24	276			38	172	27	60
7			20	150	33	123			27	61
8			26	359	30	63				
9	28	1,575	18	58			34	89		
10	25	872	29	182						
11	29	685	25	103			41	261	31	41
12	20	134	26	272					39	20
13	27	585	12	47	31	47	27	22	27	10
14	28	605	27	99			23	18	27	7
15	22	304	28	105			25	15	26	7
SEASON TOTAL		7,801		10,850		4,849		5,823		6,474

Table 42. DAILY PORT HEIDEN SECTION KING SALMON CATCHES 1979-88 (ALL GEAR)

Date	1979 Boats	1979 Catch	1980 Boats	1980 Catch	1981 Boats	1981 Catch	1982 Boats	1982 Catch	1983 Boats	1983 Catch
May 25					6	94				
26					11	218				
27					10	93				
28	2	14	4	39	7	85				
29	10	524	5	96						
30	10	288								
31	15	577					5	66	11	369
June 1	13	218			12	514	10	139	14	437
2			4	69	14	344	14	221	17	484
3			3	43	13	289	12	220		
4	19	736	12	270	13	117				
5	19	777	17	370						
6	19	561							21	1,069
7	17	724					20	1,194	21	415
8	19	634			16	902	19	721	13	271
9			13	631	17	639	20	603	19	370
10			22	488	17	411	17	447		
11	18	854	21	458	19	519				
12	6	185	20	662						
13	16	1,070							18	1,740
14	17	653					20	2,013	18	720
15	10	372			18	1,050	20	1,589	9	204
16			15	465	17	478	18	1,035	5	217
17			22	679			19	821		
18	14	515	22	559						
19	15	328	22	248						
20	14	265							12	368
21	13	224					17	1,298		
22	2	43			7	141	12	324		
23			11	75	5	181	4	163	1	113
24			9	66			2	79		
25	1	2	8	21						
26	2	63	9	46						
27	5	41	8	61						
28	6	74								
29					2	1				
30			9	3	4	1				
SEASON TOTAL		9,742		5,349		6,077		10,933		6,777

The driftnet fleet moves to the Bristol Bay area during late June. Remaining effort usually consists of several setnets in front of Meshik village.

Table 42. (continued)

Date	1984 Boats	1984 Catch	1985 Boats	1985 Catch	1986 Boats	1986 Catch	1987 Boats	1987 Catch	1988 Boats	1988 Catch
May 25										
26										
27										
28										
29										
30										
31										
June 1							7	181	1	42
2							8	124		
3					1	5	13	188		
4	13	250			6	61	5	106		
5	14	459			2	40				
6	19	325							17	496
7	20	366							17	556
8							24	568	14	326
9					19	356	29	643		
10			14	544	16	181	33	325		
11	23	1,390	13	457	8	53	6	61		
12	23	785	14	510	3	18				
13	22	601	14	338					17	1,041
14	20	472							12	582
15							24	605	19	271
16					22	431	20	380		
17			21	1,280	9	216				
18	23	893	9	193	13	201				
19	15	412	11	207	6	76				
20	5	174	1	44					19	733
21	1	53							19	1,035
22									17	516
23					1	47				
24			1	323	1	20				
25	1	85	1	153	1	11				
26	1	63	1	132	1	10				
27	1	65	1	149	1	4			16	78
28	1	65			1	12			7	28
29							10	15		
30					1	4	4	5	2	17
SEASON TOTAL		6,458		4,330		1,821		3,217		5,816

The driftnet fleet moves to the Bristol Bay area during late June. Remaining effort usually consists of several setnets in front of Meshik village.

Table 43. 1988 NELSON LAGOON DAILY SOCKEYE SALMON CATCHES (Numbers of Fish, All Gear)

Date		Permits	Catch
May	30	1	8
June	6	18	565
	7	14	382
	8	14	399
	13	5	895
	14	4	456
	15	11	999
	16	10	1,597
	20	28	7,669
	21	25	5,825
	22	24	3,918
	23	27	6,256
	27	29	14,796
	28	29	13,962
	29	22	9,859
	30	32	10,991
July	1	22	2,740
July	4	33	17,565
	5	26	9,599
	6	27	7,087
	7	27	10,551
	11	31	9,174
	12	29	5,337
	13	27	2,957
	14	27	2,541
	18	26	7,020
	19	27	3,835
	20	20	1,622
	21	19	2,028
	22	19	1,990
	25	25	3,036
	26	21	2,439
	27	23	2,023
	28	20	2,040
August	1	18	988
	2	14	1,354
	3	18	1,637
	4	18	1,382
	8	20	1,482
	9	21	1,637
	10	26	1,097
	11	16	563
	15	28	1,452
	16	25	720
	17	24	635
	22	29	332
	23	28	473
	24	30	188
	29	32	71
	30	33	118
	31	18	54
Sept.	5	22	14
	6	26	23
	7	30	4
	8	21	0
		SEASON TOTAL	186,624

Table 44. 1988 NELSON LAGOON DAILY COHO SALMON CATCHES
(Numbers of Fish, All Gear)

Date		Permits	Catch
July	25	25	1
August	1	18	9
	2	14	14
	3	18	456
	4	18	73
	8	20	596
	9	21	1,086
	10	27	1,342
	11	17	614
	15	28	4,073
	16	25	2,695
	17	24	2,050
	22	29	9,016
	23	28	9,280
	24	30	7,474
	29	32	10,110
	30	33	15,443
	31	18	3,174
Sept.	5	22	7,475
	6	26	6,739
	7	30	6,708
	8	21	2,073
	12	11	2,047
	13	19	2,876
		SEASON TOTAL	95,424

Table 45. 1988 INNER PORT HEIDEN DAILY COHO SALMON CATCHES
(Numbers of Fish, All Gear)

Date		Permits	Catch
August	8	4	108
	9	6	224
	10	1	16
	15	1	70
	16	8	781
	17	9	1,899
	18	16	1,648
	19	15	1,031
	22	18	3,314
	23	18	2,972
	24	18	3,676
	29	18	2,619
	30	10	1,566
	31	20	3,549
Sept.	5	13	1,234
	6	13	1,305
	7	10	599
	8	10	464
	15	1	180
		SEASON TOTAL	27,255

Table 46. APPROXIMATE ILNIK AND OUTER PORT HEIDEN AUGUST-SEPTEMBER SALMON CATCHES BY AREA T FISHERMEN NOT PARTICIPATING IN PORT HEIDEN JUNE FISHERY

Year	Boats	Sockeyes	Cohos	Total
1986	18	9,000	2,000	11,000
1987	17	5,000	9,000	14,000
1988	19	27,000	27,000	54,000

Table 47. Bear River sockeye daily and cumulative escapement counts, 1988.

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
June 1	53	0	53	53	0	53	0.0	0.0	0.0	0.0	0.0
2	9	3	12	62	3	65	0.0	0.0	0.0	0.0	0.0
3	0	0	0	62	3	65	0.0	0.0	0.0	0.0	0.0
4	73	3	76	135	6	141	0.0	0.0	0.0	0.0	0.0
5	0	0	0	135	6	141	0.0	0.0	0.0	0.0	0.0
6	41	0	41	176	6	182	0.0	0.0	0.1	0.0	0.1
7	527	9	536	703	15	718	0.2	0.0	0.2	0.0	0.2
8	55	0	55	758	15	773	0.0	0.0	0.2	0.0	0.2
9	468	0	468	1,226	15	1,241	0.2	0.0	0.4	0.0	0.4
10	624	0	624	1,850	15	1,865	0.2	0.0	0.6	0.0	0.6
11	123	0	123	1,973	15	1,988	0.0	0.0	0.6	0.0	0.6
12	116	3	119	2,089	18	2,107	0.0	0.0	0.7	0.0	0.7
13	107	0	107	2,196	18	2,214	0.0	0.0	0.7	0.0	0.7
14	10	0	10	2,206	18	2,224	0.0	0.0	0.7	0.0	0.7
15	28	0	28	2,234	18	2,252	0.0	0.0	0.7	0.0	0.7
16	22	1	23	2,256	19	2,275	0.0	0.0	0.7	0.0	0.7
17	0	0	0	2,256	19	2,275	0.0	0.0	0.7	0.0	0.7
18	154	0	154	2,410	19	2,429	0.0	0.0	0.8	0.0	0.8
19	455	1	456	2,865	20	2,885	0.1	0.0	0.9	0.0	0.9
20	854	1	855	3,719	21	3,740	0.3	0.0	1.2	0.0	1.2
21	1,807	5	1,812	5,526	26	5,552	0.6	0.0	1.8	0.0	1.8
22	541	0	541	6,067	26	6,093	0.2	0.0	2.0	0.0	2.0
23	820	9	829	6,887	35	6,922	0.3	0.0	2.2	0.0	2.2
24	283	5	288	7,170	40	7,210	0.1	0.0	2.3	0.0	2.3
25	764	13	777	7,934	53	7,987	0.2	0.0	2.6	0.0	2.6
26	16,412	101	16,513	24,346	154	24,500	5.3	0.0	7.9	0.0	7.9
27	28,712	94	28,806	53,058	248	53,306	9.3	0.0	17.1	0.1	17.2
28	29,662	97	29,759	82,720	345	83,065	9.6	0.0	26.7	0.1	26.8
29	17,896	91	17,987	100,616	436	101,052	5.8	0.0	32.5	0.1	32.6
30	3,832	28	3,860	104,448	464	104,912	1.2	0.0	33.7	0.1	33.8
July 01	923	17	940	105,371	481	105,852	0.3	0.0	34.0	0.2	34.1
02	501	14	515	105,872	495	106,367	0.2	0.0	34.1	0.2	34.3
03	1,210	30	1,240	107,082	525	107,607	0.4	0.0	34.5	0.2	34.7
04	1,016	81	1,097	108,098	606	108,704	0.3	0.0	34.9	0.2	35.1
05	1,563	177	1,740	109,661	783	110,444	0.5	0.1	35.4	0.3	35.6
06	1,958	270	2,228	111,619	1,053	112,672	0.6	0.1	36.0	0.3	36.3
07	1,740	225	1,965	113,359	1,278	114,637	0.6	0.1	36.6	0.4	37.0
08	1,188	207	1,395	114,547	1,485	116,032	0.4	0.1	36.9	0.5	37.4
09	481	113	594	115,028	1,598	116,626	0.2	0.0	37.1	0.5	37.6
10	265	67	332	115,293	1,665	116,958	0.1	0.0	37.2	0.5	37.7
11	167	35	202	115,460	1,700	117,160	0.1	0.0	37.2	0.5	37.8
12	786	88	874	116,246	1,788	118,034	0.3	0.0	37.5	0.6	38.1
13	7	2	9	116,253	1,790	118,043	0.0	0.0	37.5	0.6	38.1
14	1,532	332	1,864	117,785	2,122	119,907	0.5	0.1	38.0	0.7	38.7
15	1,506	261	1,767	119,291	2,383	121,674	0.5	0.1	38.5	0.8	39.2

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Table 47. Bear River sockeye daily and cumulative escapement counts, 1988 (continued).

Date	Daily			Cumulative			Daily Percent		Cumulative Percent		
	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
July 16	12,201	975	13,176	131,492	3,358	134,850	3.9	0.3	42.4	1.1	43.5
17	9,148	703	9,851	140,640	4,061	144,701	3.0	0.2	45.4	1.3	46.7
18	3,925	224	4,149	144,565	4,285	148,850	1.3	0.1	46.6	1.4	48.0
19	1,031	155	1,186	145,596	4,440	150,036	0.3	0.0	47.0	1.4	48.4
20	430	126	556	146,026	4,566	150,592	0.1	0.0	47.1	1.5	48.6
21	640	303	943	146,666	4,869	151,535	0.2	0.1	47.3	1.6	48.9
22	1,283	698	1,981	147,949	5,567	153,516	0.4	0.2	47.7	1.8	49.5
23	1,140	448	1,588	149,089	6,015	155,104	0.4	0.1	48.1	1.9	50.0
24	938	301	1,239	150,027	6,316	156,343	0.3	0.1	48.4	2.0	50.4
25	1,577	451	2,028	151,604	6,767	158,371	0.5	0.1	48.9	2.2	51.1
26	2,725	1,088	3,813	154,329	7,855	162,184	0.9	0.4	49.8	2.5	52.3
27	973	585	1,558	155,302	8,440	163,742	0.3	0.2	50.1	2.7	52.8
28	647	314	961	155,949	8,754	164,703	0.2	0.1	50.3	2.8	53.1
29	878	487	1,365	156,827	9,241	166,068	0.3	0.2	50.6	3.0	53.6
30	1,130	678	1,808	157,957	9,919	167,876	0.4	0.2	51.0	3.2	54.1
31	984	503	1,487	158,941	10,422	169,363	0.3	0.2	51.3	3.4	54.6
Aug 1	810	317	1,127	159,751	10,739	170,490	0.3	0.1	51.5	3.5	55.0
2	581	269	850	160,332	11,008	171,340	0.2	0.1	51.7	3.6	55.3
3	1,014	592	1,606	161,346	11,600	172,946	0.3	0.2	52.0	3.7	55.8
4	863	724	1,587	162,209	12,324	174,533	0.3	0.2	52.3	4.0	56.3
5	823	728	1,551	163,032	13,052	176,084	0.3	0.2	52.6	4.2	56.8
6	1,915	1,061	2,976	164,947	14,113	179,060	0.6	0.3	53.2	4.6	57.8
7	2,222	788	3,010	167,169	14,901	182,070	0.7	0.3	53.9	4.8	58.7
8	2,065	673	2,738	169,234	15,574	184,808	0.7	0.2	54.6	5.0	59.6
9	4,380	1,270	5,650	173,614	16,844	190,458	1.4	0.4	56.0	5.4	61.4
10	2,048	897	2,945	175,662	17,741	193,403	0.7	0.3	56.7	5.7	62.4
11	650	304	954	176,312	18,045	194,357	0.2	0.1	56.9	5.8	62.7
12	2,211	867	3,078	178,523	18,912	197,435	0.7	0.3	57.6	6.1	63.7
13	3,770	1,069	4,839	182,293	19,981	202,274	1.2	0.3	58.8	6.4	65.2
14	3,568	863	4,431	185,861	20,844	206,705	1.2	0.3	60.0	6.7	66.7
15	3,063	620	3,683	188,924	21,464	210,388	1.0	0.2	60.9	6.9	67.9
16	8,285	406	8,691	197,209	21,870	219,079	2.7	0.1	63.6	7.1	70.7
17	1,878	157	2,035	199,087	22,027	221,114	0.6	0.1	64.2	7.1	71.3
18	2,777	197	2,974	201,864	22,224	224,088	0.9	0.1	65.1	7.2	72.3
19	12,794	717	13,511	214,658	22,941	237,599	4.1	0.2	69.2	7.4	76.6
20	6,426	611	7,037	221,084	23,552	244,636	2.1	0.2	71.3	7.6	78.9
21	4,123	484	4,607	225,207	24,036	249,243	1.3	0.2	72.6	7.8	80.4
22	4,235	686	4,921	229,442	24,722	254,164	1.4	0.2	74.0	8.0	82.0
23	3,042	701	3,743	232,484	25,423	257,907	1.0	0.2	75.0	8.2	83.2
24	613	86	699	233,097	25,509	258,606	0.2	0.0	75.2	8.2	83.4
25	186	28	214	233,283	25,537	258,820	0.1	0.0	75.2	8.2	83.5
26	651	281	932	233,934	25,818	259,752	0.2	0.1	75.5	8.3	83.8
27	892	195	1,087	234,826	26,013	260,839	0.3	0.1	75.7	8.4	84.1
28	524	107	631	235,350	26,120	261,470	0.2	0.0	75.9	8.4	84.3
29	235	14	249	235,585	26,134	261,719	0.1	0.0	76.0	8.4	84.4
30	3,065	383	3,448	238,650	26,517	265,167	1.0	0.1	77.0	8.6	85.5
31	7,064	701	7,765	245,714	27,218	272,932	2.3	0.2	79.3	8.8	88.0
Post 31	37,091	0	37,091	282,805	27,218	310,023	12.0	0.0	91.2	8.8	100.0
Total	282,805	27,218	310,023	282,805	27,218	310,023	91.2	8.8	91.2	8.8	100.0

Table 48. Nelson River sockeye daily and cumulative escapement counts, 1988.

	Daily			Cumulative			Daily Percent		Cumulative Percent		
Date	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
June 17	507	0	507	507	0	507	0.4	0.0	0.4	0.0	0.4
18	834	6	840	1,341	6	1,347	0.6	0.0	1.0	0.0	1.0
19	657	0	657	1,998	6	2,004	0.5	0.0	1.5	0.0	1.5
20	543	0	543	2,541	6	2,547	0.4	0.0	1.9	0.0	1.9
21	1,367	63	1,430	3,908	69	3,977	1.0	0.0	2.9	0.1	2.9
22	1,157	42	1,199	5,065	111	5,176	0.9	0.0	3.8	0.1	3.8
23	762	0	762	5,827	111	5,938	0.6	0.0	4.3	0.1	4.4
24	1,952	18	1,970	7,779	129	7,908	1.4	0.0	5.8	0.1	5.9
25	5,906	123	6,029	13,685	252	13,937	4.4	0.1	10.1	0.2	10.3
26	11,061	74	11,135	24,746	326	25,072	8.2	0.1	18.3	0.2	18.6
27	13,835	126	13,961	38,581	452	39,033	10.2	0.1	28.6	0.3	28.9
28	5,406	48	5,454	43,987	500	44,487	4.0	0.0	32.6	0.4	33.0
29	2,918	18	2,936	46,905	518	47,423	2.2	0.0	34.7	0.4	35.1
30	3,198	117	3,315	50,103	635	50,738	2.4	0.1	37.1	0.5	37.6
July 01	2,397	60	2,457	52,500	695	53,195	1.8	0.0	38.9	0.5	39.4
02	2,152	12	2,164	54,652	707	55,359	1.6	0.0	40.5	0.5	41.0
03	1,587	33	1,620	56,239	740	56,979	1.2	0.0	41.7	0.5	42.2
04	7,445	216	7,661	63,684	956	64,640	5.5	0.2	47.2	0.7	47.9
05	2,927	201	3,128	66,611	1,157	67,768	2.2	0.1	49.3	0.9	50.2
06	3,056	307	3,363	69,667	1,464	71,131	2.3	0.2	51.6	1.1	52.7
07	4,214	347	4,561	73,881	1,811	75,692	3.1	0.3	54.7	1.3	56.1
08	3,930	170	4,100	77,811	1,981	79,792	2.9	0.1	57.6	1.5	59.1
09	6,541	422	6,963	84,352	2,403	86,755	4.8	0.3	62.5	1.8	64.3
10	5,616	276	5,892	89,968	2,679	92,647	4.2	0.2	66.6	2.0	68.6
11	4,765	285	5,050	94,733	2,964	97,697	3.5	0.2	70.2	2.2	72.4
12	3,303	237	3,540	98,036	3,201	101,237	2.4	0.2	72.6	2.4	75.0
13	1,275	270	1,545	99,311	3,471	102,782	0.9	0.2	73.6	2.6	76.1
14	2,209	254	2,463	101,520	3,725	105,245	1.6	0.2	75.2	2.8	78.0
15	1,532	279	1,811	103,052	4,004	107,056	1.1	0.2	76.3	3.0	79.3
16	2,879	360	3,239	105,931	4,364	110,295	2.1	0.3	78.5	3.2	81.7
17	5,029	549	5,578	110,960	4,913	115,873	3.7	0.4	82.2	3.6	85.8
18	6,281	797	7,078	117,241	5,710	122,951	4.7	0.6	86.8	4.2	91.1
19	1,812	443	2,255	119,053	6,153	125,206	1.3	0.3	88.2	4.6	92.7
20	1,262	159	1,421	120,315	6,312	126,627	0.9	0.1	89.1	4.7	93.8
21	944	68	1,012	121,259	6,380	127,639	0.7	0.1	89.8	4.7	94.5
22	544	123	667	121,803	6,503	128,306	0.4	0.1	90.2	4.8	95.0
23	702	183	885	122,505	6,686	129,191	0.5	0.1	90.7	5.0	95.7
Post-23	5,809	0	5,809	128,314	6,686	135,000	4.3	0.0	95.0	5.0	100.0
Total	128,314	6,686	135,000	128,314	6,686	135,000	95.0	5.0	95.0	5.0	100.0

Post 23 July escapement determined by year 1985 where 95.5 % of the run was past the tower by 23 July.

Table 49. Salmon escapement survey counts in the South Peninsula, 1988.

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Sockeye	Species: Pink	Species: Chum	Species: Coho	Observer	Remarks
SOUTHEASTERN DISTRICT										
281-35.07	Bluff Point	01-Sep	245	Good	0	350	0	0	Schwarz	200 pinks at stream mouth
281-35.06	Boulder Bay	01-Sep	245	Good	0	1,100	2,000	0	Schwarz	600 pinks in stream, balance in the lagoon
281-35.05	Fox Bay	11-Aug	224	Good	0	0	0	0	Schwarz	1,000 pinks at stream mouth
		20-Aug	233	Good	0	400	0	0	Schwarz	
		01-Sep	245	Good	0	4,170	0	0	Schwarz	3,500 pinks at stream mouth, 4,000 were in the lake
281-35.04	Fox Bay	11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	2,525	0	0	Schwarz	All pinks in stream mouth, 5,000 pinks along the beach
		20-Aug	233	Good	0	1,475	0	0	Schwarz	
		01-Sep	245	Good	0	300	100	0	Schwarz	100 pinks at stream mouth
281-35.02	Fox Bay	11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	500	0	0	Schwarz	14,000 pinks along the beach
		01-Sep	245	Good	0	4,700	0	0	Schwarz	5,000 pinks at stream mouth, good escapement
281-34.08	Island Bay	20-Aug	233	Good	0	10	0	0	Schwarz	1,250 pinks at stream mouth
		01-Sep	245	Good	0	250	0	0	Schwarz	1,800 pinks at stream mouth
281-34.07	Island Bay	01-Sep	245	Good	0	400	0	0	Schwarz	9,400 pinks at stream mouth

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-34.06	Island Bay	11-Aug	224	Good	0	0	0	0	Schwarz	1,100 pinks at stream mouth
		17-Aug	230	Good	0	35	0	0	Schwarz	4,250 pinks along the beach
		20-Aug	233	Good	0	1,000	0	0	Schwarz	7,000 pinks along the beach
		01-Sep	245	Good	0	850	0	0	Schwarz	See stream 281-34.05 remarks
281-34.05	Island Bay	11-Aug	224	Good	0	40	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	100	0	0	Schwarz	7,000 pinks along the beach
		01-Sep	245	Good	0	3,400	0	0	Schwarz	4,800 pinks along the beach
281-34.04	Unnamed	01-Sep	245	Good	0	400	0	0	Schwarz	1,000 pinks at stream mouth
281-34.03	Stonehouse	13-Aug	226	Good	0	50	0	0	Schwarz	3,500 pinks at stream mouth
		17-Aug	230	Good	0	11	0	0	Schwarz	5,800 pinks at stream mouth
		20-Aug	233	Good	0	100	0	0	Schwarz	19,000 pinks along the beach
		01-Sep	245	Good	0	5,600	0	0	Schwarz	10,800 pinks in the lagoon
281-34.02	Osterback	13-Aug	226	Good	0	16	0	0	Schwarz	5,000 pinks at stream mouth
		17-Aug	230	Good	0	95	0	0	Schwarz	
		20-Aug	233	Good	0	1,000	0	0	Schwarz	3,300 pinks along the beach
		01-Sep	245	Good	0	11,000	0	0	Schwarz	3,900 pinks at stream mouth
281-34.01	Granville-Portage Inlet	13-Aug	226	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	170	500	0	Schwarz	1,500 fish along beach
		01-Sep	245	Good	0	2,000	700	0	Schwarz	650 additional chums in the lagoon
281-33.05	Stepovak River	20-Aug	233	Good	0	0	50	0	Schwarz	Surveyed first 3 clear water tributaries

-Continued-

Table 49. (page 3 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-33.05	Stepovak River (continued)	01-Sep	245	Good	0	700	10,000	0	Schwarz	As compared to 1987 and 1986 the escapement is poor
281-33.04	Big River	01-Sep	245	Good	0	0	1,250	0	Schwarz	
281-33.03	Louie's Corner	20-Aug	233	Poor	0	0	170	0	Schwarz	Main stream muddy
		01-Sep	245	Fair	0	0	3,300	0	Schwarz	
281-33.02	Ramsey Bay	01-Sep	245	Fair	0	1,100	3,000	0	Schwarz	Muddy water in portions of the stream
281-33.01	Ramsey Bay	01-Sep	245	Fair	0	2,400	0	0	Schwarz	Muddy water
281-32.07	Grub Gulch	28-Jul	210	Good	0	13	0	0	Schwarz	
		11-Aug	224	Good	0	7,950	0	0	Schwarz	
		17-Aug	230	Poor	0			0	Schwarz	Muddy water
		20-Aug	233	Good	0	10,000	1,500	0	Schwarz	Some jumpers along the beach
		01-Sep	245	Good	0	38,000	3,500	0	Schwarz	Excellent escapement, species ID difficult
281-32.05	Clark Bay	28-Jul	210	Good	0	150	0	0	Schwarz	
		11-Aug	224	Good	0	1,000	0	0	Schwarz	
		17-Aug	230	Poor	0		0	0	Schwarz	Muddy water
		20-Aug	233	Good	0	1,615	0	0	Schwarz	Stream could use more escapement
		01-Sep	245	Good	0	3,600	0	0	Schwarz	200 pinks at stream mouth
281-32.04	Little Norway	28-Jul	210	Good	0	15	0	0	Schwarz	350 pinks at stream mouth, low water conditions
		17-Aug	230	Good	0	2,810	0	0	Schwarz	1,000 fish along the beach

-Continued-

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-32.04 (continued)	Little Norway	20-Aug	233	Good	0	3,000	1,300	0	Schwarz	3,500 fish along the beach
		01-Sep	245	Good	0	11,200	0	0	Schwarz	1,000 pinks at stream mouth, good escapement
281-31.03	Orzinski (Orzenoi) Lake	07-Jul	189	Good	3,100	0	0	0	Shaul	100 sockeye at stream mouth, 100 sockeye in river
		14-Jul	196	Fair	3,500	0	0	0	Probasco	Some jumpers at stream mouth
		21-Jul	203	Excel.	16,400	0	0	0	Shaul	1,500 sockeye at stream mouth, 50 at outlet, coloring
		28-Jul	210	Fair	6,285	0	0	0	Schwarz	11 schools of sockeye in the lake, rough estimate
		05-Aug	218	Good		107	0	0	Schwarz	Stream survey only using Trident helicopter
		11-Aug	224	Fair	12,200	1,000	0	0	Schwarz	4,000 pinks at stream mouth, didn't fly center of lake
		17-Aug	230	Good	7,000	9,200	0	0	Schwarz	Stream survey only
		20-Aug	233	Good		11,000	0	0	Schwarz	20,000 pinks at stream mouth, 50% of sockeye spawning
		25-Aug	238	Good	15,300	20,000	0	0	Shaul	1,000 pinks at stream mouth
		01-Sep	245	Good	15,800	38,300	0	0	Schwarz	
281-20.04	Windbound Bay	11-Aug	224	Good	0	1,375	0	0	Schwarz	
		20-Aug	233	Good	0	2,225	0	0	Schwarz	1,000 pinks at stream mouth
		01-Sep	245	Good	0	3,200	0	0	Schwarz	2,200 pinks at stream mouth
281-20.03	Chichagof Stream	11-Aug	224	Good	0	3,325	0	0	Schwarz	
		17-Aug	230	Good	0	5,100	0	0	Schwarz	
		20-Aug	233	Good	0	6,500	0	0	Schwarz	
		01-Sep	245	Good	0	2,350	0	0	Schwarz	See stream 281-20-02 remarks

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Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-20.02	Chichagof	28-Jul	210	Good	0	55	0	0	Schwarz	Additional 775 chums and 225 pinks in outlet
		11-Aug	224	Good	0	950	0	0	Schwarz	Additional 300 pinks in lagoon
		17-Aug	230	Good	0	1,400	0	0	Schwarz	Poor escapement
		20-Aug	233	Good	0	1,000	0	0	Schwarz	Additional 200 fish in lagoon, poor escapement
		01-Sep	245	Good	0	4,300	0	0	Schwarz	Additional 5,000 pinks in outlet, 6,900 fish in lagoon
281-20.01	Chichagof Bay	11-Aug	224	Good	0	3,200	0	0	Schwarz	Low water in stream
		17-Aug	230	Poor	0		0	0	Schwarz	Muddy water
		20-Aug	233	Poor	0	900	0	0	Schwarz	Muddy water
		01-Sep	245	Poor	0	3,600	0	0	Schwarz	Muddy water
281-10.04	West Cove	11-Aug	224	Good	0	0	0	0	Schwarz	5,000 fish at stream mouth
		20-Aug	233	Good	0	0	0	0	Schwarz	1,000 fish at stream mouth
		01-Sep	245	Good	0	1,550	0	0	Schwarz	
281-10.03	Suzy Creek	21-Jul	203	Good	0	6,000	0	0	Shaul	12,000 pinks at stream mouth
		28-Jul	210	Good	0	27,025	0	0	Schwarz	Jumpers at stream mouth
		05-Aug	218	Good	0	26,275	0	0	Schwarz	500 pinks at stream mouth, used Trident helicopter
		11-Aug	224	Good	0	24,000	0	0	Schwarz	8,000 pinks at stream mouth
		17-Aug	230	Poor	0		0	0	Schwarz	Muddy water
		20-Aug	233	Good	0	28,150	0	0	Schwarz	5,000 pinks at stream mouth, 5,000 pink carcasses
		25-Aug	238	Good	0	55,000	0	0	Shaul	60,000 pinks at stream mouth

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
281-10.03 (continued)	Suzy Creek	01-Sep	245	Good	0	22,400	0	0	Schwarz	2,500 pinks at stream mouth, poor escapement almost as many carcasses as live fish
281-10.02	Dorenoi Minor	11-Aug	224	Good	0	0	0	0	Schwarz	325 pinks at stream mouth
		20-Aug	233	Good	0	1,210	0	0	Schwarz	1,000 pinks at stream mouth
		01-Sep	245	Good	0	3,400	0	0	Schwarz	Good escapement
281-10.01	Dorenoi Major	11-Aug	224	Good	0	7,155	0	0	Schwarz	
		20-Aug	233	Good	0	13,850	2,000	0	Schwarz	Good escapement
		01-Sep	245	Good	0	15,600	0	0	Schwarz	Good escapement
283-90.04	San Diego Bay	11-Aug	224	Good	0	0	500	0	Schwarz	Additional 3,850 chums in lagoon
		01-Sep	245	Good	0	0	75	0	Schwarz	
283-90.03	San Diego	01-Sep	245	Good	0	0	25	0	Schwarz	
283-90.	San Diego Lagoon	20-Aug	233	Good	0	0	2,400	0	Schwarz	Additional 1,500 chums in outlet
		01-Sep	245	Good	0	0	6,000	0	Schwarz	Additional 850 chums in outlet
283-90.02	Rough Beach	28-Jul	210	Good	0	0	0	0	Schwarz	Stream outlet blocked with beach debri
		05-Aug	218	Good	0	2,400	0	0	Schwarz	250 pinks at stream mouth, outlet passable, helicopter
		11-Aug	224	Good	0	11,125	0	0	Schwarz	250 pinks at stream mouth
		13-Aug	226	Good	0	10,360	0	0	Schwarz	2,000 pinks at stream mouth
		17-Aug	230	Poor	0	1,610	0	0	Schwarz	Muddy water
		20-Aug	233	Poor	0	7,010	0	0	Schwarz	700 pinks at stream mouth, didn't survey lower stream

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-90.02	Rough Beach	25-Aug	238	Good	0	55,000	0	0	Shaul	Could not see off stream mouth
(continued)		01-Sep	245	Poor	0	12,100	0	0	Schwarz	Could not survey lower stream, muddy water
283-90.01	Swedania Point	28-Jul	210	Good	0	10	0	0	Schwarz	
		05-Aug	218	Good	0	75	0	0	Schwarz	Helicopter survey
		11-Aug	224	Good	0	2,000	0	0	Schwarz	5,000 pinks at stream mouth
		13-Aug	226	Good	0	1,900	0	0	Schwarz	3,000 pinks at stream mouth
		17-Aug	230	Good	0	9,425	0	0	Schwarz	
		20-Aug	233	Good	0	14,000	0	0	Schwarz	3,000 pinks at stream mouth
		25-Aug	238	Good	0	23,000	0	0	Shaul	40,000 pinks at stream mouth
		01-Sep	245	Good	0	34,750	0	0	Schwarz	3,500 pinks at stream mouth, good escapement
282-13.02	Dry Lagoon	28-Jul	210	Good	0	100	0	0	Schwarz	
		11-Aug	224	Good	0	20,150	0	0	Schwarz	Additional 1,100 carcasses
		17-Aug	230	Poor	0	16,275	0	0	Schwarz	
		20-Aug	233	Poor	0		0	0	Schwarz	Lots of fish
		30-Aug	243	Poor	0	21,000	5,000	0	Shaul	Poor visibility below the forks
		01-Sep	245	Poor	0			0	Schwarz	
282-13.03	Bay Point	15-Jul	197	Excel.	0	0	0	0	Probasco	800 pinks at stream mouth
		28-Jul	210	Good	0	900	0	0	Schwarz	
		05-Aug	218	Good	0	8,600	2,900	0	Schwarz	
		11-Aug	224	Good	0	14,250	2,000	0	Schwarz	850 of the pinks were in the lagoon
		17-Aug	230	Poor	0			0	Schwarz	24,000 pinks and chums in stream, fog and drizzel
		20-Aug	233	Good	0	22,200		0	Schwarz	
		30-Aug	243	Good	0	32,000		0	Shaul	

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Table 49. (page 8 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-13.04	Pinnacle Point	11-Aug	224	Good	0	1,150	0	0	Schwarz	
		20-Aug	233	Good	0	5,800	0	0	Schwarz	
		30-Aug	243	Good	0	10,000	0	0	Shaul	
282-13.05	Unnamed	01-Sep	245	Good	0	0	0	0	Schwarz	
282-10.02	Apollo Minor	05-Aug	218	Good	0	100	0	0	Schwarz	
		11-Aug	224	Good	0	500	0	0	Schwarz	
		17-Aug	230	Good	0	1,425	0	0	Schwarz	
		20-Aug	233	Good	0	3,525	0	0	Schwarz	
		01-Sep	245	Fair	0	1,900	0	0	Schwarz	Dark and difficult to survey
282-10.03	Apollo Creek	15-Jul	197	Excel.	0	0	0	0	Probasco	
		06-Aug	219	Good	0	1,800	0	0	Shaul	
		11-Aug	224	Good	0	1,215	0	0	Schwarz	
		17-Aug	230	Good	0	4,700	0	0	Schwarz	
		20-Aug	233	Good	0	10,325	0	0	Schwarz	
		01-Sep	245	Fair	0	5,300	0	0	Schwarz	Dark and difficult to survey
282-10.04	Acheredin Lake	15-Jul	197	Excel.	0	0	0	0	Probasco	200 pinks at lake outlet
		06-Aug	219	Good	3,100	0	0	0	Shaul	Sockeye are schooled and colored
		11-Aug	224	Fair	2,810	0	0	0	Schwarz	Could have missed some fish while puking
282-10.10	Unnamed	01-Sep	245	Good	0	0	0	0	Schwarz	300 chums at stream mouth
282-10.12	Unga Cape	01-Sep	245	Good	0	0	0	0	Schwarz	200 pinks at stream mouth

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Table 49. (page 9 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-10.11	Apollo Gold Mine	06-Aug	219	Good	0	0	0	0	Shaul	200 chums at stream mouth
		11-Aug	224	Good	0	1,225	0	0	Schwarz	All fish just inside stream
		17-Aug	230	Good	0	45	0	0	Schwarz	
		20-Aug	233	Good	0	3,425	0	0	Schwarz	
		01-Sep	245	Fair	0	6,100	0	0	Schwarz	Poor light conditions
282-10.13	Baralof Bay	06-Aug	219	Good	0	0	0	0	Shaul	Stream mouth closed due to beach debri
		25-Aug	238	Good	0	0	0	0	Shaul	Stream mouth closed due to beach debri
		01-Sep	245	Good	0	0	0	0	Schwarz	Squaw Harbor watchman unplugged stream watchman said a few were in the lake but none observed from survey
282-10.14	Squaw Harbor Minor	11-Aug	224	Good	0	1,000	0	0	Schwarz	
		17-Aug	230	Good	0	3,000	0	0	Schwarz	Fish just entered stream
		20-Aug	233	Good	0	5,700	0	0	Schwarz	2,200 pinks at stream mouth, excellent escapement
		25-Aug	238	Good	0	5,600	0	0	Shaul	
		01-Sep	245	Fair	0	7,200	0	0	Schwarz	
282-10.15	Squaw Harbor Major	06-Aug	219	Good	0	200	0	0	Shaul	4,000 pinks at stream mouth, 5,000 pinks on the beach
		11-Aug	224	Good	0	8,550	0	0	Schwarz	1,400 pinks at stream mouth
		17-Aug	230	Good	0	11,825	0	0	Schwarz	
		20-Aug	233	Good	0	22,950	0	0	Schwarz	Not many fish along the beach
		25-Aug	238	Good	0	92,000	0	0	Shaul	11,000 pinks at stream mouth, excellen escapement
		01-Sep	245	Good	0	55,800	0	0	Schwarz	200 pinks at stream mouth

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Table 49. (page 10 of 32)

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-10.16	Ben Green Bight	06-Aug	219	Good	0	100	0	0	Shaul	10,000 pinks at stream mouth
		11-Aug	224	Good	0	9,925	0	0	Schwarz	
		17-Aug	230	Good	0	6,200	0	0	Schwarz	Could hold a few more fish
		01-Sep	245	Good	0	10,700	0	0	Schwarz	
282-12.09	South Quartz Point	28-Jul	210	Good	0	0	0	0	Schwarz	
		11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		01-Sep	245	Good	0	0	0	0	Schwarz	
282-12.08	South Quartz Point	28-Jul	210	Good	0	0	0	0	Schwarz	
		11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	0	0	0	Schwarz	3,000 pinks along the beach
		01-Sep	245	Good	0	50	0	0	Schwarz	
282-12.07	Zachary Bay	15-Jul	197	Good	0	0	0	0	Probasco	400 pinks at stream mouth
		28-Jul	210	Good	0	0	250	0	Schwarz	All were carcasses
		11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	0	0	0	Schwarz	1,000 pinks along the beach
		01-Sep	245	Good	0	60	0	0	Schwarz	500 pinks at stream mouth
282-12.06	Zachary Bay	28-Jul	210	Good	0	0	0	0	Schwarz	
		11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Good	0	470	0	0	Schwarz	5,300 pinks along the beach
		01-Sep	245	Good	0	25	0	0	Schwarz	

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-12.05	Zachary Bay	28-Jul	210	Good	0	0	330	0	Schwarz	All were carcasses
		11-Aug	224	Good	0	200	0	0	Schwarz	
		17-Aug	230	Good	0	200	0	0	Schwarz	
		20-Aug	233	Good	0	510	0	0	Schwarz	2,700 pinks were along the beach
		01-Sep	245	Good	0	0	0	0	Schwarz	50 pinks at stream mouth
282-12.04	Zachary Bay	28-Jul	210	Good	0	0	0	0	Schwarz	200 pinks in closed waters
		20-Aug	233	Good	0	300	0	0	Schwarz	2,300 pinks along the beach
		01-Sep	245	Good	0	1,450	0	0	Schwarz	1,900 pinks at stream mouth
282-12.03	Zachary Bay	28-Jul	210	Good	0	0	0	0	Schwarz	
		11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	100	0	0	Schwarz	
		20-Aug	233	Good	0	100	0	0	Schwarz	
		01-Sep	245	Good	0	75	0	0	Schwarz	300 pinks at stream mouth
282-12.02	Zachary Bay	11-Aug	224	Good	0	0	0	0	Schwarz	
		17-Aug	230	Good	0	0	0	0	Schwarz	
		20-Aug	233	Poor	0	0	0	0	Schwarz	
		01-Sep	245	Good	0	250	0	0	Schwarz	100 pinks at stream mouth
282-12.01	Coal Harbor	17-Aug	230	Good	0	25	0	0	Schwarz	
		01-Sep	245	Good	0	100	0	0	Schwarz	
282-10.18	Humbolt Creek	01-Sep	245	Good	1	1,005	0	21	Schwarz	Cohos at culvert, jumpers in the lake
		30-Sep	274	Good	0	500	0	30	Dunaway	8 jumpers during 15-18 minutes observation of lake, 5 cohos in first 100 yards above lake, may be Dollys, below lake 15 pinks and 114 carcasses

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Table 49. (page 12 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
282-11.01	Salmon Ranch	01-Sep	245	Good	0	550	0	0	Schwarz	1,000 pinks at stream mouth
282-11.03	Fox Hole	20-Aug	233	Poor	0	0	0	0	Schwarz	1,500 pinks at stream mouth
		01-Sep	245	Good	0	2,500	0	0	Schwarz	2,500 pinks at stream mouth
282-20.00	Sanborn Harbor	24-Aug	237	Good	0	3,500	0	0	Shaul	3,000 pinks along the beach
282-20.03	Sanborn Harbor	24-Aug	237	Good	0	0	1,000	0	Shaul	1,000 pinks at stream mouth, chums mostly spawning
282-20.04	Sanborn Harbor	24-Aug	237	Good	0	8,000	0	0	Shaul	3,500 pinks at stream mouth, plus 1,000 carcasses, excellent looking stream
282-20.05	Falmouth Harbor	24-Aug	237	Good	0	400	100	0	Shaul	Additional 300 pinks and 100 chums in the lagoon
283-80.16	Ballast	01-Sep	245	Good	0	1,400	0	0	Schwarz	
283-80.15	Coleman	13-Aug	226	Good	0	0	0	0	Schwarz	4,500 chums at stream mouth
		20-Aug	233	Poor	0	0	1,300	0	Schwarz	Lots of fish on the flats, no estimate due to glare
		01-Sep	245	Good	0	2,650	11,000	0	Schwarz	4,500 chums at stream mouth
283-80.14	Johnson	13-Aug	226	Good	0	650	100	0	Schwarz	6,500 fish at stream mouth
		20-Aug	233	Good	0	1,700	500	0	Schwarz	5,000 fish at stream mouth
		01-Sep	245	Good	0	6,000	600	0	Schwarz	1,000 pinks at stream mouth

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Table 49. (page 13 of 32)

Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-80.12	Foster's Camp	01-Sep	245	Good	0	600	0	0	Schwarz	
283-80.11	Foster's Camp	01-Sep	245	Good	0	1,300	0	0	Schwarz	
283-80.09	Foster's Creek	28-Jul	210	Good	0	0	0	0	Schwarz	2,000 pinks at stream mouth
		13-Aug	226	Good	0	8,500	0	0	Schwarz	8,000 pinks between Lefthand and Foster's
		17-Aug	230	Poor	0		0	0	Schwarz	
		20-Aug	233	Excel.	0	10,500	0	0	Schwarz	11,200 fish between Albatros and Foster's
		01-Sep	245	Good	0	1,300	2,000	0	Schwarz	4,200 fish at stream mouth
283-80.08	Lefthand Bay	28-Jul	210	Good	0	100	0	0	Schwarz	250 pinks along the beach
		13-Aug	226	Good	0	6,000	1,500	0	Schwarz	6,100 pinks? along the beach
		20-Aug	233	Excel.	0	15,000	4,000	0	Schwarz	12,000 fish along the beach
		01-Sep	245	Poor	0			0	Schwarz	22,700 fish, maybe more, 2,800 fish at mouth some coho
		30-Sep	274	Good	0	0	0	2,200	Shaul	All cohos in lower 2 miles of stream
283-80.06	Cape Aliaksin East	13-Aug	226	Good	0	1,000	0	0	Schwarz	700 pinks at stream mouth
		17-Aug	230	Good	0	2,600	0	0	Schwarz	2,000 pinks at stream mouth
		20-Aug	233	Good	0	9,400	0	0	Schwarz	1,500 pinks at stream mouth, good escapement
		30-Aug	243	Good	0	19,000	0	0	Shaul	Excellent escapement
283-80.05	Cape Aliaksin Center	13-Aug	226	Good	0	0	0	0	Schwarz	500 pinks at stream mouth
		17-Aug	230	Good	0	525	0	0	Schwarz	1,250 pinks at stream mouth
		20-Aug	233	Good	0	205	0	0	Schwarz	
		30-Aug	243	Good	0	3,000	0	0	Shaul	

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Table 49. (page 14 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-80.04	Cape Aliaksin West	13-Aug	226	Good	0	7,275	0	0	Schwarz	500 pinks at stream mouth
		17-Aug	230	Good	0	4,500	0	0	Schwarz	2,000 pinks at stream mouth
		20-Aug	233	Good	0	9,400	0	0	Schwarz	1,500 pinks at stream mouth, good escapement
		30-Aug	243	Good	0	12,500	0	0	Shaul	Excellent escapement
SOUTHWESTERN DISTRICT										
283-70.05	Beaver River	13-Aug	226	Good	0	18,200	1,480	0	Schwarz	River is low and clear
		25-Aug	238	Poor	0	34,000	9,000	0	Schwarz	1,000 fish at stream mouth, muddy water in lower river
		01-Sep	245	Poor	0	15,100		0	Schwarz	Fish in upper portion of river, muddy in lower river
		30-Sep	274	Good	0	0	0	700	Shaul	500 cohos in slough off first bend in river
283-70.04	Smiley's	13-Aug	226	Good	0	85	0	0	Schwarz	
		30-Aug	243	Poor	0	1,800	0	0	Shaul	
283-70.03	McGinty Point	05-Aug	218	Good	0	1,615	0	0	Schwarz	Helecopter survey
		13-Aug	226	Good	0	3,100	0	0	Schwarz	Fish were just inside stream mouth
		30-Aug	243	Good	0	5,400	0	0	Shaul	Poor escapement
283-70.02	East of Mino	06-Aug	219	Good	0	5,000	0	0	Shaul	Fish in lower 1/4 mile of stream
		20-Aug	233	Good	0	6,000	0	0	Schwarz	
		30-Aug	243	Good	0	31,800	0	0	Shaul	27,000 were below forks, good escapement

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Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-70.01	Mino Creek	15-Jul	197	Good	0	800	0	0	Probasco	600 pinks at stream mouth, lots of Dolly Varden
		21-Jul	203	Good	0	4,700	1,400	0	Shaul	Several thousand Dolly Varden
		27-Jul	209	Good	0	17,000	2,000	0	Shaul	Several thousand Dolly Varden, low water flow
		05-Aug	218	Good	0	23,100		0	Schwarz	Helicopter Survey
		06-Aug	219	Good	0	23,000		0	Shaul	Surveyed below E Fork
		20-Aug	233	Good	0	52,700	0	0	Shaul	
		30-Aug	243	Good	600	103,600	0	0	Shaul	37,000 pinks below D Fork, 400 sockeye in F and 200 in D lake
283-62.05	Coal Bay Major	15-Jul	197	Good	0	100	0	0	Probasco	50 pinks at stream mouth
		27-Jul	209	Good	0	1,300	0	0	Shaul	
		06-Aug	219	Good	0	8,400	0	0	Shaul	Fish up to canyon, 2 boats at stream mouth
		20-Aug	233	Good	0	31,100	0	0	Schwarz	
		30-Aug	243	Good	0	43,000	0	0	Shaul	Good escapement
283-62.04	Coal Bay Minor	15-Jul	197	Good	0	0	0	0	Probasco	
		27-Jul	209	Good	0	100	0	0	Shaul	
		06-Aug	219	Good	0	1,200	0	0	Shaul	100 pinks at stream mouth
		20-Aug	233	Good	0	4,600	0	0	Shaul	
		30-Aug	243	Good	0	20,700	0	0	Shaul	
283-62.03	Coal Bay Middle	30-Aug	243	Good	0	1,000	0	0	Shaul	
283-62.02	Coal Bay	30-Aug	243	Good	0	2,200	0	0	Shaul	

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Stream Number	Stream Name/Location	Calendar Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-62.01	Cape Tolstoi	Not Surveyed								
283-63.16	Settlement Point	15-Jul	197	Good	0	0	0	0	Probasco	500 pinks at stream mouth
		21-Jul	203	Good	0	9,300	0	0	Shaul	400 fish along beach
		27-Jul	209	Good	0	32,200	0	0	Shaul	26,400 pinks below forks, nothing in right fork
		06-Aug	219	Good	0	58,900	0	0	Shaul	41,000 below forks, 200 in right fork
		11-Aug	224	Good	0	128,000	0	0	Shaul	94,000 pinks were below the forks
		19-Aug	232	Good	0	190,000	600	0	Shaul	500 chums in side branch by mouth, good escapement
		30-Aug	243	Good	0	212,300	1,000	0	Shaul	3,000 chums at stream mouth, 18,000 pinks in fork, 16,000 pinks below forks
283-63.15	Middle Creek	15-Jul	197	Good	0	0	0	0	Probasco	50 pinks at stream mouth
		27-Jul	209	Good	0	8,400	0	0	Shaul	400 pinks in the fork
		06-Aug	219	Good	0	20,600	0	0	Shaul	1,600 pinks in the fork
		19-Aug	232	Good	0	56,500	0	0	Shaul	Good escapement
		30-Aug	243	Good	0	95,000	0	0	Shaul	17,000 pinks in the fork
283-64.10	Ness Creek	Not Surveyed								
283-64.09	Inner Canoe Bay	19-Aug	232	Good	0	0	300	0	Shaul	200 chums at stream mouth, additional 100 carcasses
		30-Aug	243	Good	0	0	4,200	0	Shaul	1,000 chums at stream mouth
283-64.08	Entrance Creek	27-Jul	209	Good	0	100	0	0	Shaul	
		06-Aug	219	Good	0	600	0	0	Shaul	15-20,000 chums near stream mouth

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-64.08	Entrance Creek (continued)	11-Aug	224	Fair	0	1,200	0	0	Shaul	High altitude survey in Goose, surveyed below forks
		19-Aug	232	Fair	0	3,200	300	0	Shaul	Lower 1/4 mile of stream muddy due to land slide
		30-Aug	243	Good	0	7,800	1,800	0	Shaul	2,000 chums at stream mouth
283-64.06	Canoe Bay River	07-Jul	189	Good	0	0	700	0	Probasco	Additional 5,000 chums in inner bay
		15-Jul	197	Good	0	0	5,200	0	Shaul	Plus 47,000 chums in inner bay, jumpers NW outer bay
		21-Jul	203	Excel.	300	0	19,000	0	Shaul	Plus 10,000 chums in inner bay, choppy water in bay
		27-Jul	209	Excel.		0	35,800	0	Shaul	Plus 12,000 chums in inner bay, 12,500 chums at mouth
		19-Aug	232	Poor	1,000	800	86,000	0	Shaul	4,000 chums in 4 Bears Creek, 300 pinks in Wolverine
		30-Aug	243	Good	1,200	36,200	25,700	0	Shaul	3,900 pinks & 5,000 chums in 4 Bears, 2,300 pinks & 300 chums in Wolverine 12,000 pinks in outer bay
		30-Sep	274	Good	0	0	0	500	Shaul	
283-64.05	Bluff Point	27-Jul	209	Good	0	0	200	0	Shaul	
		06-Aug	219	Good	0	1,000	1,500	0	Shaul	About 15,000 chums at stream mouth
		19-Aug	232	Good	0	3,500	5,000	0	Shaul	6,000 chums at stream mouth
		30-Aug	243	Good	0	17,000	7,000	0	Shaul	4,000 pinks at stream mouth
283-63.14	Dry Lagoon	24-Aug	237	Good	0	0	0	0	Shaul	
283-63.13	Ruby's Lagoon	24-Aug	237	Good	0	0	8,500	0	Shaul	5,000 were in the lagoon

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Table 49. (page 18 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-63.11	Chinaman Lagoon North	24-Aug	237	Good	0	0	0	0	Shaul	
283-63.10	Chinaman Lagoon Main	24-Aug	237	Good	0	0	400	0	Shaul	4,500 chums in the lagoon near mouth of 63.10
283-63.09	Chinaman Lagoon	24-Aug	237	Good	0	0	0	0	Shaul	
283-63.06	Chinaman Lagoon South	24-Aug	237	Good	0	0	900	0	Shaul	9,000 chums near stream mouth
283-63.05	Lower Chinaman Lagoon	24-Aug	237	Good	0	0	500	0	Shaul	See stream 283-63.06 remarks
283-63.04	Chinaman Stream South	24-Aug	237	Good	0	0	5,600	0	Shaul	2,000 chums at stream mouth, 5,000 chums in lower portion of the stream
283-61.05	Long John Lagoon	08-Sep	252	Good	0	0	0	300	Shaul	
283-61.04	Spring Fed Lakes	29-Jul	211	Good	700	0	0	300	Shaul	All sockeye were spawning
		31-Aug	244	Good	1,200	1,600	0	0	Shaul	
283-61.03	Long John Lagoon	31-Aug	244	Good	0	500	200	0	Shaul	

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Table 49. (page 19 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-61.02	Southwest Stream	22-Aug	235	Good	0	1,100	2,000	0	Shaul	5,000 chums in pothole, lots of seals in lagoon
		31-Aug	244	Fair	0	2,600	4,400	0	Shaul	Poor visibility in the pothole and the lagoon
		08-Sep	252	Good	0	1,000	6,000	0	Shaul	3,000 chums at stream mouth
SOUTHWESTERN DISTRICT										
283-52.10	Dushkin Lagoon	Not Surveyed								
283-52.08	Volcano River	08-Aug	221	Good	0	200	900	0	Shaul	500 chums at stream mouth, lots of fish schools in bay
		17-Aug	230	Good	0		1,300	0	Shaul	Partial survey only east fork and below, Goose survey
		22-Aug	235	Good	0	1,200	4,400	0	Shaul	7,000 chums at stream mouth
		31-Aug	244	Good	0	2,600	8,700	0	Shaul	6,000 chums at stream mouth
		08-Sep	252	Good	0	6,000	14,000	0	Shaul	1,000 chums at stream mouth
283-52.07	Volcano Center Slough	08-Aug	221	Good	0	0	200	0	Shaul	5,000 chums on the flats
		22-Aug	235	Good	0	1,200	1,900	0	Shaul	13,000 chums at stream mouth
		31-Aug	244	Good	0	4,300	9,000	0	Shaul	3,000 pinks and 5,000 chums at stream mouth
		08-Sep	252	Good	0	1,000	9,000	0	Shaul	2,000 chums at stream mouth, skiff tracks at stream mouth, 13,000 chum catch reported since September 14
283-52.06	West Springholes	08-Aug	221	Good	0	0	300	0	Shaul	2,000 chums on flats
		22-Aug	235	Good	0	1,500	500	0	Shaul	5,000 pinks and 6,000 chums at stream mouth

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Table 49. (page 20 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-52.06	West Springholes (continued)	31-Aug	244	Good	0	6,800	0		Shaul	12,000 pinks at stream mouth
		08-Sep	252	Good	0	7,000	500	0	Shaul	2,000 pinks at stream mouth
283-52.05	Streamguard Creek	22-Aug	235	Good	0	0	0	0	Shaul	
		31-Aug	244	Good	0	600	0	0	Shaul	2,000 pinks between creek and marker
		08-Sep	252	Good	0	0	300	0	Shaul	
283-52.04	Stub Creek	22-Aug	235	Good	0	700	0	0	Shaul	500 pinks at stream mouth
		31-Aug	244	Good	0	3,500	0	0	Shaul	2,000 pinks at stream mouth
		08-Sep	252	Good	0	7,500	0	0	Shaul	6,000 pinks at stream mouth, good escapement
283-52.03	Little Bear Bay	22-Aug	235	Good	0	0	0	0	Shaul	8,000 pinks and 8,000 chums in bay
		31-Aug	244	Good	0	1,600	1,400	0	Shaul	5,000 pinks and 5,000 chums at stream mouth, 12,000 chums and 65,000 pinks in bay
		08-Sep	252	Good	0	5,400	1,000	0	Shaul	10,000 pinks stream mouth, 35,000 pinks in inner bay
283-52.01	Nikolaski Spit	06-Aug	219	Good	0	300	0	0	Shaul	300 pinks at stream mouth
		13-Aug	226	Good	0	1,000	0	0	Shaul	
		20-Aug	233	Good	0	2,400	0	0	Shaul	
		22-Aug	235	Good	0	4,000	0	0	Shaul	300 pinks at stream mouth
		31-Aug	244	Good	0	9,300	0	0	Shaul	3,000 pinks at stream mouth
283-51.06	Dolgoi Harbor Southwest	06-Aug	219	Good	0	300	0	0	Shaul	300 pinks at stream mouth
		08-Aug	221	Good	0	700	0	0	Shaul	2,000 pinks at stream mouth

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-51.06	Dolgoi Harbor Southwest	22-Aug	235	Good	0	4,900	0	0	Shaul	4,000 pinks at stream mouth, good escapement
(continued)		31-Aug	244	Good	0	8,700	0	0	Shaul	20,000 pinks along beaches in harbor
283-51.05	Dolgoi Harbor South	31-Aug	244	Good	0	3,000	0	0	Shaul	Excellent escapement
283-51.03	Dolgoi Harbor	22-Aug	235	Good	0	100	0	0	Shaul	4-5,000 pinks along beach to the south
		31-Aug	244	Good	0		0	0	Shaul	See stream 283-51.06 remarks
283-41.01	Belkofski Village	29-Jul	211	Good	0	400	0	0	Shaul	300 pinks at stream mouth, fish in lower 200 yards
		06-Aug	219	Good	0	5,500	0	0	Shaul	3,000 pinks at stream mouth, 5,00 in lower 1/2 mile
		08-Aug	221	Good	0	8,200	0	0	Shaul	2,000 pinks at stream mouth, 5-6,000 pinks along beach
		11-Aug	224	Good	0	13,000	0	0	Shaul	2,000 pinks at stream mouth, surveyed lower 1/2 mile
		13-Aug	226	Good	0	17,500	0	0	Shaul	
		17-Aug	230	Good	0	27,100	0	0	Shaul	
		20-Aug	233	Good	0	26,500	0	0	Shaul	2,000 pinks along beach
		22-Aug	235	Excel.	0	26,500	0	0	Shaul	2,000 pinks at stream mouth
		31-Aug	244	Good	0	27,000	0	0	Shaul	
283-42.12	Rocky River	29-Jul	211	Good	0	200	0	0	Shaul	1,200 pinks at stream mouth, low water conditions
		06-Aug	219	Good	0	700	0	0	Shaul	200 pinks at stream mouth
		08-Aug	221	Good	0	2,100	0	0	Shaul	4,000 pinks at stream mouth

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Table 49. (page 22 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-42.12 (continued)	Rocky River	11-Aug	224	Good	0	4,000	0	0	Shaul	5,000 pinks at stream mouth, surveyed below canyon
		13-Aug	226	Good	0	7,000	0	0	Shaul	1,000 pinks at stream mouth
		17-Aug	230	Good	0	9,000	0	0	Shaul	500 pinks at stream mouth, surveyed below canyon only, probably 2-3,000 pinks above canyon
		20-Aug	233	Good	0	7,700	0	0	Shaul	8-10,000 pinks at stream mouth, surveyed below canyon only, probably 3-4,000 pinks above canyon
		22-Aug	235	Excel.	0	9,000	0	0	Shaul	5,000 pinks at stream mouth
		31-Aug	244	Good	0	18,200	0	0	Shaul	2,000 pinks at stream mouth, good escapement
283-42.10	Kitchen Anchorage	08-Aug	221	Good	0	0	0	0	Shaul	3,000 pinks in bay
		20-Aug	233	Good	0	400	0	0	Shaul	
		22-Aug	235	Good	0	600	0	0	Shaul	15,000 pinks at stream mouth
		31-Aug	244	Good	0	5,700	0	0	Shaul	50,000 pinks at stream mouth, & 50,000 pinks on beach
		08-Sep	252	Good	0	16,000	0	0	Shaul	50,000 pinks at stream mouth
283-42.09	Captain's Harbor	22-Aug	235	Good	0	1,000	0	0	Shaul	1,000 pinks at stream mouth
		31-Aug	244	Good	0	8,700	0	0	Shaul	15,000 pinks at stream mouth
		08-Sep	252	Good	0	18,000	0	0	Shaul	12,000 pinks at stream mouth and 9,000 pinks in harbor
283-42.07	Belkofski Bay River	08-Aug	221	Good	0	100	1,800	0	Shaul	15,000 chums stream mouth & 3,000 chums in Captain's

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Table 49. (page 23 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-42.07	Belkofski Bay River (continued)	20-Aug	233	Good	0	0	12,000	0	Shaul	30-50,000 chums at mouth and Captain's Harbor, partial survey of below 4-way junction
		22-Aug	235	Good	0	0	12,700	0	Shaul	15-20,000 chums at stream mouth
		31-Aug	244	Good	0	5,300	31,800	0	Shaul	3,000 pinks and 11,000 chums at stream mouth, and 10,000 chums & 100,000 pinks in Captain's Harbor
		08-Sep	252	Good	0	14,000	27,000	0	Shaul	5,000 pinks at stream mouth
		30-Sep	274	Good	0	0	0	3,700	Shaul	Cohos are in schools up to 4-way junction
283-42.06	Belkofski Bay Beach	08-Aug	221	Good	0	100	0	0	Shaul	
		31-Aug	244	Good	0	3,000	0	0	Shaul	
283-42.05	Belkofski Bay	29-Jul	211	Good	0	600	0	0	Shaul	500 pinks at stream mouth
		08-Aug	221	Good	0	800	0	0	Shaul	3,000 pinks at stream mouth
		20-Aug	233	Good	0	6,500	0	0	Shaul	Partial survey of right fork only, Goose survey
		22-Aug	235	Good	0	7,400	0	0	Shaul	
		31-Aug	244	Good	0	14,600	0	0	Shaul	
283-42.03	Indian Head	17-Jul	199	Fair	0	1,000	0	0	Shaul	1,500 pinks stream mouth, partial survey lower 1/4 mile
		20-Aug	233	Good	0	1,500	0	0	Shaul	1,000 pinks at stream mouth
		22-Aug	235	Good	0	2,200	0	0	Shaul	1,000 pinks at stream mouth
		31-Aug	244	Good	0	11,000	0	0	Shaul	12,000 pinks at stream mouth, 4,000 pinks along beach
		08-Sep	252	Good	0	11,000	0	0	Shaul	2,000 pinks at stream mouth, 8,000 pinks along beach

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-33.05	Ram's Creek	17-Jul	199	Good	0	6,200	0	0	Shaul	6,000 were in lower portion of stream
		20-Aug	233	Good	0	5,300	0	0	Shaul	6,000 pinks at stream mouth, 2,000 in lower stream
		22-Aug	235	Good	0	6,800	200	0	Shaul	3,800 pinks above the culvert
		24-Aug	237	Good	0	7,700		0	Shaul	2-3,000 pinks at stream mouth, 4,300 above culvert
		25-Aug	238	Excel.	0	8,500	0	0	Shaul	10,000 at stream mouth, 200-250,000 front of village
		31-Aug	244	Good	0	25,000	0	0	Shaul	1,000 pinks at stream mouth, additional 6,000 on beach
		08-Sep	252	Good	0	18,200	0	0	Shaul	1,000 pinks at stream mouth
283-33.04	King Cove Lagoon	31-Aug	244	Good	0	0	200	0	Shaul	7,000 chums at stream mouth
283-33.03	King Cove Lagoon	31-Aug	244	Good	0	0	100	0	Shaul	1,000 chums at stream mouth
283-31.01	Fox Island Anchorage East	06-Aug	219	Good	0	500	0	0	Shaul	1,000 pinks at stream mouth
		11-Aug	224	Good	0	9,000	0	0	Shaul	Partial survey only of lower 1/4 mile
		13-Aug	226	Good	0	32,000	0	0	Shaul	Good escapement
		22-Aug	235	Good	0	48,000	0	0	Shaul	
		30-Aug	243	Good	0	71,000	0	0	Shaul	2,000 pinks at stream mouth
283-31.02	Fox Island Anchorage Center	06-Aug	219	Good	0	100	0	0	Shaul	
		22-Aug	235	Good	0	3,900	0	0	Shaul	
		30-Aug	243	Good	0	8,000	0	0	Shaul	

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-31.03	Fox Island	06-Aug	219	Good	0	10,600	0	0	Shaul	Possible illegal fishing activity
	Anchorage	11-Aug	224	Good	0	27,000	0	0	Shaul	Good escapement
	West	22-Aug	235	Good	0	30,200	0	0	Shaul	
		30-Aug	243	Good	0	31,000	0	0	Shaul	
283-31.05	Paw Cape Creek	06-Aug	219	Good	0	400	0	0	Shaul	
		22-Aug	235	Good	0	4,100	0	0	Shaul	
		30-Aug	243	Good	0	4,000	0	0	Shaul	
283-31.06	Southern Creek	27-Jul	209	Good	0	5,500	0	0	Shaul	100 pinks at stream mouth, low water conditions
		06-Aug	219	Poor	0	70,600	0	0	Shaul	Partial survey lower 3 miles
		22-Aug	235	Good	0	268,000	0	0	Shaul	Excellent escapement
		30-Aug	243	Good	0	208,000	0	0	Shaul	
283-31.10	Eastern Creek	27-Jul	209	Good	0	100	0	0	Shaul	Low water conditions in stream
		06-Aug	219	Poor	0	21,400	0	0	Shaul	200 pinks at stream mouth
		13-Aug	226	Poor	0	33,000	0	0	Shaul	
		22-Aug	235	Good	0	30,000	0	0	Shaul	1,000 pinks at stream mouth, poor escapement in lower portion of stream but excellent 1/4 m above mouth
		30-Aug	243	Good	0	31,000	0	0	Shaul	2,000 pinks at stream mouth, good escapement
283-34.11	Lenard	22-Aug	235	Good	0	300	0	0	Shaul	200 pinks at stream mouth
	Harbor South	31-Aug	244	Good	0	1,400	0	0	Shaul	300 pinks at stream mouth

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Table 49. (page 26 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-34.10	Lenard Harbor	08-Aug	221	Good	0	0	200	0	Shaul	2,000 chums at stream mouth, abuse of stream by ATV's
		22-Aug	235	Good	0	1,400	3,000	0	Shaul	4,000 chums at stream mouth
		31-Aug	244	Good	0	6,300	9,800	0	Shaul	400 chums at stream mouth
		30-Sep	274	Good	0	0	0	200	Shaul	Partial survey of lower 1/2 mile
283-34.09	Barney's Creek	16-Aug	229	Good	0	2,300	0	0	Shaul	2,000 pinks at stream mouth
		31-Aug	244	Good	0	8,700	600	0	Shaul	600 pinks at stream mouth
283-34.07	Kinzarof Lagoon	25-Aug	238	Good	900	500	200	0	Shaul	1,000 fish at stream mouth, mostly sockeye
283-34.06	Kinzarof Lagoon	Not Surveyed								
283-34.05	Kinzarof Lagoon	02-Sep	246	Good	700	0	0	0	Shaul	300 cohos at stream mouth
283-34.03	Trout Creek	30-Aug	243	Good	10	400	300	100	Shaul	Coho were above the bridge
283-34.02	Russel Creek	15-Jul	197	Good	0	0	3,000	0	Shaul	All fish were below weir, 600 in Nurse Lagoon
		27-Jul	209	Good	0	2,500	27,400	0	Shaul	400 above hatchery
		19-Aug	232	Good	50	13,200	57,500	0	Shaul	16,000 chums in Nurse Lagoon, 200 pinks & 4,500 chums above hatchery
		30-Aug	243	Good	600	7,800	41,300	0	Shaul	3,000 chums in Nurse Lagoon, 800 pinks & 6,300 chums above hatchery

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-34.01	Mortensen Lagoon	19-Aug	232	Good	700	0	0	0	Shaul	500 sockeye at stream mouth, some spawning
		30-Aug	243	Good	1,000	0	0	0	Shaul	100 sockeye at stream mouth, spawning
		08-Sep	252	Good	1,100	0	0	0	Shaul	300 sockeye at stream mouth, fish in stream spawning
		29-Sep	273	Good	2,300	0	0	0	Shaul	300 fish spawning in lake, rest in creek, at least as many carcasses as live fish in creek
283-32.01	Old Man's Lagoon	15-Jul	197	Good	0	0	200	0	Shaul	All the fish in lower 300 yards of stream
		05-Aug	218	Good	0	0	1,500	0	Shaul	500 chums at stream mouth
		30-Aug	243	Good	0	0	800	0	Shaul	Plus as many carcasses
283-20.06	Thinpoint Lagoon &	09-Jul	191	Good	300	0	0	0	Shaul	Survey lagoon only
		15-Jul	197	Good	200	0	0	0	Shaul	Survey lagoon only, jumpers at lagoon mouth & on beach
	Entrance Channel	20-Jul	202	Good	800	0	0	0	Shaul	Survey lagoon only
		27-Jul	209	Excel.	3,700	0	0	0	Shaul	Survey lagoon only
		05-Aug	218	Good	14,800	0	0	0	Shaul	Survey lagoon only, good escapement, some fish along beach, fish moving into the lake
		08-Aug	221	Good	11,700	0	0	0	Shaul	Survey lagoon only, fish moving from lagoon into lake
		19-Aug	232	Good	8,500	0	0	0	Shaul	Survey lagon only, 1,000 moving into lake
		30-Aug	243	Good	5,000	0	0	2,000	Shaul	100 sockeye were in lake outlet
		08-Sep	252	Good	5,500	0	0	5,500	Shaul	11,000 fish roughly 50-50% sockeye and coho
		29-Sep	273	Good	0	0	0	5,000	Shaul	

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Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-20.08	Thinpoint West	30-Aug	243	Good	0	0	0	0	Shaul	Survey mouth only
		08-Sep	252	Good	0	0	0	0	Shaul	
283-20.09	Thinpoint Lake Stream	30-Aug	243	Good	600	0	0	0	Shaul	1,000 sockeye at stream mouth
		08-Sep	252	Good	1,800	0	0	0	Shaul	300 sockeye at stream mouth, fish spawning
		29-Sep	273	Good	2,000	0	0	0	Shaul	
283-20.10	Thinpoint Lake	30-Aug	243	Good	500	0	0	0	Shaul	Fish were spawning
		08-Sep	252	Good	4,200	0	0	0	Shaul	Fish spawning, 300 along S. shore remainer on E. shore
		29-Sep	273	Poor	0	0	0	0	Shaul	
283-20.04	Southwest Bight	05-Aug	218	Good	0	2,600	0	0	Shaul	
		08-Aug	221	Good	0	5,200	0	0	Shaul	1,000 pinks at stream mouth, good escapement
		31-Aug	244	Good	0	10,900	0	0	Shaul	
283-20.03	Verskin's Bight	05-Aug	218	Good	0	4,300	0	0	Shaul	5,000 pinks at stream mouth
		08-Aug	221	Good	0	15,000	0	0	Shaul	3,000 pinks at stream mouth, good escapement
		31-Aug	244	Good	0	21,000	0	0	Shaul	
283-20.01	Sandy Cove Stream	27-Jul	209	Good	0	200	0	0	Shaul	Fish in lower 100 yards of stream
		05-Aug	218	Good	0	500	600	0	Shaul	
		08-Aug	221	Good	0	800	2,500	0	Shaul	
		17-Aug	230	Poor	0			0	Shaul	19,200 pinks and chums
		31-Aug	244	Good	0	2,700	15,000	0	Shaul	

-Continued-

Table 49. (page 29 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-11.01	Egg Island Stream	05-Aug	218	Good	0	400	0	0	Shaul	
		31-Aug	244	Good	0	5,600	1,100	0	Shaul	
283-12.13	Little John Lagoon	08-Aug	221	Good	0	0	200	0	Shaul	400 chums on flats, poor escapement
		17-Aug	230	Good	0	0	500	0	Shaul	1,000 chums at stream mouth, partial survey
		31-Aug	244	Good	0	2,000	4,500	0	Shaul	3,000 chums at stream mouth, another 1,500 chums by spit, 600 chums were in spring fed stream
283-12.12	Little John Sand Spit	31-Aug	244	Good	0	200	50	0	Shaul	
283-12.11	Cannery	31-Aug	244	Good	0	1,000	900	0	Shaul	800 chums and 200 pinks in lagoon
283-12.05	Middle Lagoon	09-Jul	191	Good	100	0	0	0	Shaul	Survey lagoon only
		20-Jul	202	Good	1,700	0	0	0	Shaul	Survey lagoon only
		19-Aug	232	Good	300	0	0	0	Shaul	Survey lagoon only, all at upper portion of muc flat
		31-Aug	244	Good	1,600	0	0	0	Shaul	Spawning in lake, 1 jumper in the pothole
		08-Sep	252	Good	5,700	0	0	0	Shaul	300 spawning in outlet stream, rest spawning in lake
		29-Sep	273	Good	1,500	0	0	0	Shaul	Survey lake only, all spawning, Cherokee survey
283-12.01	Hansen's	27-Jul	209	Good	40	0	0	0	Shaul	
		08-Aug	221	Good		100	0	0	Shaul	400 pinks at stream mouth, poor

-Continued-

Table 49. (page 30 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
										escapement
283-12.01	Hansen's	31-Aug	244	Good	100	12,300	300	0	Shaul	Chums in lower portion of stream, 300 pinks in lake, few sockeye carcasses better escapement than in 1986
284-60.08	Deadman's Cove	27-Jul	209	Good	30	1,400	0	0	Shaul	Sockeye in lake turning color, thousands of Dolly's
		05-Aug	218	Good	300	37,000	0	0	Shaul	5-10,000 pinks at stream mouth
		08-Aug	221	Good		52,600	0	0	Shaul	Excellent escapement
		31-Aug	244	Good		101,000	0	0	Shaul	
284-60.07	Whalebone Bay	20-Jul	202	Good	1,200	0	0	0	Shaul	50 sockeye at stream mouth, fish in lake colored
		05-Aug	218	Good		0	0	0	Shaul	1,000 pinks at stream mouth, partial survey of system
		08-Aug	221	Good		0	0	0	Shaul	400 pinks at stream mouth, partial survey of system
		31-Aug	244	Good	550	700	0	0	Shaul	50 pinks at stream mouth, 50 sockeye in Divide Lake, 300 pinks above lake
284-60.06	Sankin Bay	08-Aug	221	Good	0	100	0	0	Shaul	2,000 pinks at stream mouth
		19-Aug	232	Good	0	1,000	0	0	Shaul	400 pinks at stream mouth, all in lower part of stream
		31-Aug	244	Good	0	1,500	200	0	Shaul	
284-60.05	Whirl Point	05-Aug	218	Good	0	0	0	0	Shaul	100 pinks at stream mouth
		18-Aug	231	Good	0	300	0	0	Shaul	300 pinks at stream mouth
		19-Aug	232	Good	0	50	0	0	Shaul	
		31-Aug	244	Good	0	1,000	0	0	Shaul	1,500 pinks at stream mouth

-Continued-

Table 49. (page 31 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
284-60.04	Ikatan River	31-Aug	244	Excel.	0	27,600	5,000	0	Shaul	Spawning in main river
284-60.03	Swede's Lake	20-Jul	202	Good	200	0	0	0	Shaul	
		05-Aug	218	Good		0	0	0	Shaul	200 pinks at stream mouth, partial survey of outlet
		19-Aug	232	Good	50	0	0	0	Shaul	200 pinks at stream mouth
		31-Aug	244	Good		200	0	0	Shaul	100 pinks at stream mouth, partial survey of outlet
284-60.01	Ikatan Point	05-Aug	218	Good	0	700	0	0	Shaul	
		19-Aug	232	Good	0	3,000	0	0	Shaul	
		31-Aug	244	Good	0	6,800	0	0	Shaul	
UNIMAK DISTRICT										
284-50.00	Dora Harbor Left	31-Aug	244	Good	0	900	0	0	Shaul	
284-40.09	Otter Cove North	08-Aug	221	Good	0	4,100	0	0	Shaul	
		19-Aug	232	Good	0	4,700	0	0	Shaul	
		31-Aug	244	Good	0	7,800	200	0	Shaul	
284-40.08	Otter Cove South	08-Aug	221	Good	0	100	0	0	Shaul	100 pinks at stream mouth
		19-Aug	232	Good	0	200	400	0	Shaul	
		31-Aug	244	Good	0	2,600	400	0	Shaul	
284-40.05	Lazaref River	31-Aug	244	Good	0	3,000	500	0	Shaul	

-Continued-

Table 49. (page 32 of 32)

Stream Number	Stream Name/Location	-Calendar- Date	Day	Survey Cond.	Species: Sockeye	Pink	Chum	Coho	Observer	Remarks
283-10.??	Sanak Village	Not Surveyed								
283-10.??	Sanak Is. W.	Not Surveyed								
283-10.??	Dodd's Bay W.	Not Surveyed								
283-10.??	Dodd's Bay E.	Not Surveyed								
283-10.??	Sandy Bay	Not Surveyed								
283-10.??	Salmon Bay	Not Surveyed								

Zero indicates no fish present, blank indicates fish were not counted.

Table 50. Salmon escapement survey counts in the Aleutian Islands Management Area, 1988.

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Sockeye	Species: Pink	Species: Chum	Observer	Remarks
302-	Akutan Harbor	Not Surveyed							
302-40.10	Humpy Cove	27-Jul	209	Good	0	0	0	Ward	
		02-Aug	215	Good	0	0	0	Parker	2,000 pinks at stream mouth, foot survey
		10-Aug	223	Good	0	100	0	Griffin	Foot survey
		11-Aug	224	Good	0	0	0	Griffin	6,000 pinks at stream mouth
		13-Aug	226	Good	0	100	0	Shaul	
		17-Aug	230	Good	0	8,000	0	Griffin	Foot survey
		07-Sep	251	Good	0	3,200	0	Shaul	
302-40.09	Summer Bay	27-Jul	209	Good	0	0	0	Ward	Partial survey of outlet stream only
		11-Aug	224	Good	0	0	0	Griffin	1,000 pinks at stream mouth
		13-Aug	226	Good	800	0	0	Shaul	
302-40.08	Unalaska Village	27-Jul	209	Good	0	200	0	Ward	Foot survey, jumpers in the bay
		03-Aug	216	Good	0	1,800	0	Ward	Foot survey
		08-Aug	221	Good	0	6,000	0	Griffin	8-10,000 pinks at stream mouth, schools in lake not counted
		11-Aug	224	Good	0	12,000	0	Griffin	Additional 10-20,000 pinks in the lake
		13-Aug	226	Good	0	21,000	0	Shaul	
		07-Sep	251	Good	0	31,500	0	Shaul	1,500 pinks above lake, excellent escapement
302-40.07	Pyramid Creek	Not Surveyed							
302-40.06	Captain's Bay	27-Jul	209	Good	0	10	0	Parker	1,000 pinks at stream mouth, foot survey
		02-Aug	215	Good	0	100	0	Parker	Foot survey
		11-Aug	224	Good	0	1,000	0	Ward	All fish in lower 1/2 mile of stream
		13-Aug	226	Good	0	1,500	0	Shaul	
		07-Sep	251	Good	0	2,200	0	Shaul	Poor escapement

-Continued-

Table 50. (page 2 of 4)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Sockeye	Species: Pink	Species: Chum	Observer	Remarks
302-40.05	Nateekin River	28-Jul	210	Good	0	5,000	0	Shaul	Very poor escapement for this time
		03-Aug	216	Good	0	10,000	0	Ward	Foot survey of lower mile, 8,000 in slough by hill, 2,000+ below, probably 20,000 along the beach
		08-Aug	221	Good	0	27,500	0	Griffin	
		11-Aug	224	Poor	0	15,000	0	Griffin	Muddy water, 19,000 in corner by spruce tree, 10,000 on beach
		13-Aug	226	Good	0	56,000	0	Shaul	30-50,000 in corner by spruce tree
		18-Aug	231	Good	0	75,000	0	Griffin	10-15,000 at stream mouth
		20-Aug	233	Good	0	110,000	0	Griffin	5,000 along beach, jumpers near cabin, no concentration in bay
		07-Sep	251	Good	0	105,000	0	Shaul	Over half are schooled
302-40.03	Makushin Valley	07-Sep	251	Good	0	38,000	0	Shaul	Good improvement in escapement over past two years
302-15.07	McLee's Lake	Not Surveyed							
302-15.05	Driftwood Bay	Not Surveyed							
302-13.10	Volcano Bay	07-Sep	251	Good	700	0	0	Shaul	100 sockeye in upper L, rest in lower portion
302-14.20	Makushin Village	13-Aug	226	Good	0	0	0	Shaul	100 pinks at stream mouth
302-14.18	Glacier Valley	28-Jul	210	Good	0	0	0	Shaul	
		13-Aug	226	Good	0	300	0	Shaul	
		07-Sep	251	Good	0	70,000	0	Shaul	Excellent escapement

-Continued-

Table 50. (page 3 of 4)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species Sockeye	Species Pink	Species Chum	Observer	Remarks
302-14.17	Humpback Bay #2	13-Aug	226	Good	0	1,200	0	Shaul	Large scholl of about 50,000 pinks at west end of beach
		20-Aug	233	Good	0	2,000	0	Griffin	Some jumpers in the bay
		07-Sep	251	Good	0	15,600	0	Shaul	
302-14.16	Humpback Bay #1	29-Jul	211	Good	0	500	0	Shaul	Very poor escapement for this time
		13-Aug	226	Good	0	4,800	0	Shaul	300 pinks at stream mouth, see remarks under stream 14.17
		20-Aug	233	Good	0	18,600	0	Griffin	Nothing in the bay
		07-Sep	251	Good	0	83,000	0	Shaul	
302-14.14	Portage #2	07-Sep	251	Good	0	1,500	0	Shaul	
302-13.05	Skan Bay	13-Aug	226	Good	0	500	0	Shaul	
		07-Sep	251	Good	0	3,000	0	Shaul	Better escapement than parent year but still poor
302-12.15	Pumicestone Bay	Not Surveyed							
302-12.11	Pumicestone Bay	07-Sep	251	Good	0	5,000	0	Shaul	Poor escapement
302-12.09	McIver Bight	07-Sep	251	Good	100	800		Shaul	Very poor escapement
302-12.07	Kashega West A Lake	13-Aug	226	Good	10,000	0	0	Shaul	See remarks under 12.07B
		07-Sep	251	Good	1,200	0	0	Shaul	See remarks under 12.07B
302-12.07	Kashega Bay B	13-Aug	226	Good	1,600	5,300	0	Shaul	5,000 pinks at outlet, see remarks 12.07A
		07-Sep	251	Good	1,000	15,000	0	Shaul	5,000 pinks at outlet, 2,500 above lake, see remarks 12.07A

-Continued-

Table 50. (page 4 of 4)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Sockeye	Species: Pink	Species: Chum	Observer	Remarks
302-12.05	Kismaliuk Bay	07-Sep	251	Good	0	4,500	0	Shaul	Poor escapement, did not survey .04, probably not over 1,000 fish in .04
302-12.04	Kismaliuk Bay	Not Surveyed							
302-12.03	Kismaliuk Bay	07-Sep	251	Good	0	3,400	0	Shaul	Poor escapement
302-11.08	Chernofski Harbor	07-Sep	251	Poor	0	5,300	0	Shaul	Poor escapement
302-11.06	Station Bay	07-Sep	251	Poor	0	3,100	0	Shaul	Very poor escapement
302-11.05	Station Bay	Not Surveyed							
302-11.04	Station Bay West Arm	07-Sep	251	Poor	0	2,100	0	Shaul	Very poor escapement

Table 51. Salmon escapemnent survey counts in the North Peninsula, 1988.

Stream Number	Stream Name/Location	—Calendar— Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
NORTHWESTERN DISTRICT											
311-30.05	Unnamed	Not Surveyed									
311-30.07	Whaleback Mountain Creek	17-Jun	169	Poor	0	0	0	0	0	Shaul	Cherokee survey, no sign of any large number of fish
		24-Jun	176	Good	0	0	0	0	0	Shaul	Cherokee survey, good sign of fish in lower 1/2 mile of outlet channel
		09-Jul	191	Good	0	15,400	0	0	0	Shaul	14,000 in lower mile of outlet channel
		15-Jul	197	Good	0	26,700	0	0	0	Shaul	100 in creek, 7,000 in lower end of late, rest in outlet channel, few in lower 300 yards of channel
		29-Jul	211	Good	0	28,600	0	2,000	0	Shaul	10,600 in creek, few spawning, chums run starting
311-30.08	Christianson Lagoon	09-Jul	191	Good	0	0	0	0	0	Shaul	
		15-Jul	197	Good	0	0	0	0	0	Shaul	See Whaleback Mt. Creek
		29-Jul	211	Good	0	1,100	0	0	0	Shaul	
311-30.09	Mudhole	09-Jul	191	Good	0	0	0	500	0	Shaul	7,500 chums in lagoon and the outlet
		29-Jul	211	Good	0	0	0	5,500	0	Shaul	2,400 chums in lagoon, 800 chums in the outlet
311-30.10	Clear Lagoon	09-Jul	191	Good	0	0	0	100	0	Shaul	See remarks under 30.09
		29-Jul	211	Good	0	100	0	400	0	Shaul	See remarks under 30.09

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Table 51. (page 2 of 14)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
311-40.01	Emil's River	29-Jul	211	Good	0	0	0	1,500	0	Shaul	
311-40.04	North Creek	29-Jul	211	Good	0	0	0	200	0	Shaul	
311-50.01	Big River	19-Aug	232	Good	0	0	0	1,100	0	Shaul	Survey spawning tributary only
311-50.02	Swanson Lagoon	09-Jul	191	Good	0	200	0	600	0	Shaul	4,000 chums in outlet, plus 400 chums in pothole
		15-Jul	197	Good	0		0	1,900	0	Shaul	Additional 200+ in lagoon, partial survey creek only
		24-Jul	206	Good	0	200	0	2,500	0	Shaul	Additional 2-3,000 in upper portion of lagoon, good sign of fish coming into lagoon, closed prior week
		29-Jul	211	Good	0	300	0	6,000	0	Shaul	1,000 chums spawning, 7,000 in pothole, 3,200 fish in outlet channel of which most were chums
		08-Aug	221	Poor	0	3,000	0	2,800	0	Shaul	Species ID difficult, little sign of fish in lagoon
		19-Aug	232	Good	0	100	0	1,700	0	Shaul	All fish in creek, very little in lagoon
		31-Aug	244	Good	0	1,700	0	0	0	Shaul	200 sockeye at mouth of creek, rest spawning in lagoon outlet
		29-Sep	273	Fair	0	500	0	0	0	Shaul	Sockeye spawning lagoon and shoreline, Cherokee survey
311-60.01	Mike's Valley	24-Jun	176	Good	0	0	0	0	0		
		09-Jul	191	Good	0	0	0	2,200	0	Shaul	
		15-Jul	197	Good	0	0	0	3,400	0	Shaul	1,800 in upper valley, skiff tracks

-Continued-

Table 51. (page 3 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
311-60.01 (continued)	Mike's Valley	24-Jul	206	Good	0	0	0	3,700	0	Shaul	Partial survey of lower 2 miles, skiff tracks
		29-Jul	211	Fair	0	0	0	2,700	0	Shaul	Partial survey all but upper 2 m, 2,200 in lower 2 m
		08-Aug	221	Good	0	0	0	5,000	0	Shaul	Partial survey of lower 1/2 mile
		19-Aug	232	Good	0	0	3,300	4,100	0	Shaul	1,300 pinks & 2,600 chums in lower 2 miles
		31-Aug	244	Good	0	0	7,700	2,300	0	Shaul	
311-60.06	Anderson's	05-Aug	218	Good	0	0	400	400	0	Shaul	200 pinks and chums at stream mouth
		19-Aug	232	Good	0	0	1,800	300	0	Shaul	Only 100 pinks above first mile
		31-Aug	244	Good	0	0	1,500	1,000	0	Shaul	100 chums at stream mouth, 1,400 pinks spawning
311-60.07 & .08	Traders Cove	05-Aug	218	Good	0	0	0	0	0	Shaul	1-2,000 chums on the flats
		19-Aug	232	Good	0	0	2,400	300	0	Shaul	2,000 chums on flats & 3,000 chums in channel
		31-Aug	244	Good	0	0	12,100	1,600	0	Shaul	9,000 chums at stream mouth
311-60.12	Warmsprings Bay	19-Aug	232	Good	0	0	0	0	0	Shaul	No sign on the flats
		31-Aug	244	Good	0	0	0	500	0	Shaul	1,500 chums on the flats
311-60.13	Hungry's Creek	19-Aug	232	Good	0	100	1,000	200	0	Shaul	
		31-Aug	244	Good	0	0	4,500	0	0	Shaul	200 pinks at stream mouth
312-20.01	Norma Bay	02-Sep	246	Good	0	250	0	200	0	Shaul	300 chums at stream mouth

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Table 51. (page 4 of 14)

Stream Number	Stream Name/Location	—Calendar— Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
312-20.02	Mike's Duck Camp	15-Jul	197	Good	0	0	0	600	0	Shaul	
		29-Jul	211	Good	0	0	0	1,800	0	Shaul	Fish scattered all the way up the stream
		19-Aug	232	Good	0	0	0	3,900	0	Shaul	300 chums at stream mouth, 2,500 in lower 1/2 mile
		02-Sep	246	Good	0	0	0	3,700	0	Shaul	2,000 chums at stream mouth
312-20.03	Norma Bay South	29-Jul	211	Good	0	0	0	400	0	Shaul	200 chums at stream mouth
		19-Aug	232	Good	0	0	0	3,400	0	Shaul	10,000 chums in alligator hole
		02-Sep	246	Good	0	0	0	7,300	0	Shaul	8,000 chums at stream mouth, plus 600 chums in spring west of the the stream mouth
312-20.04	Norma Bay South	19-Aug	232	Good	0	0	0	1,100	0	Shaul	300 chums at stream mouth
		02-Sep	246	Good	0	0	0	4,200	0	Shaul	1,000 chums at stream mouth
312-20.52	2nd stream W of Frosty Cr.	19-Aug	232	Good	0	0	0	300	0	Shaul	5,000 chums at stream mouth
		02-Sep	246	Good	0	0	0	2,100	0	Shaul	4,000 chums at stream mouth
312-20.51	Springs South of Frosty	19-Aug	232	Good	0	0	0	900	0	Shaul	
		02-Sep	246	Good	0	0	0	3,200	0	Shaul	
312-20.05	Frosty Creek	09-Jul	191	Good	0	0	0	1,000	0	Shaul	Partial survey of lower 1/2 mile
		15-Jul	197	Good	0	0	0	4,100	0	Shaul	
		27-Jul	209	Good	0	0	0	8,200	0	Shaul	5,500 spawning, 2,700 schooled in lower 2 miles
		19-Aug	232	Good	0	0	0	9,800	0	Shaul	4,800 spawning
		02-Sep	246	Good	0	20	0	18,700	0	Shaul	1,000 chums at stream mouth

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Table 51. (page 5 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
312-20.06	Blue Bill Lake	30-Aug	243	Good	0	2,000	0	0	0	Shaul	
312-20.13	Outer Marker Lake	30-Aug	243	Good	0	450	0	500	0	Shaul	400 sockeye in Lamprey Lake & 50 in Vortex Lake, chums spawning in outlet streams
312-40.00	Spring fed 2m SW of Joshua Green River	02-Sep	246	Good	0	0	0	200	0	Shaul	
312-40.01	Joshua Green River	06-Jul	188	Good	0	0	0	14,800	0	Shaul	14,000 chums were from forks to the lake
		12-Jul	194	Good	0	3,000	0	52,200	0	Shaul	3,000 chums below forks, sockeye & 47,000 chums from forks to the lake, remainder above the lake
		19-Jul	201	Good	0	7,000	0	20,000	0	Shaul	Partial survey below lake, 1,200 chums below forks
		27-Jul	209	Excel.	0	3,000	0	15,100	0	Shaul	Partial survey below lake, 2,800 fish below forks
		05-Aug	218	Fair	100	8,600	0	51,300	0	Shaul	Only 1,000 chums in lefthand, 3,300 below fork, 18,000 chums in righthand, 300 sockeye in A lake, chinook spawning in main righthand river
		19-Aug	232	Good			0	7,800	0	Shaul	Partial survery below forks, 6,300 fish below forks
		02-Sep	246	Excel.		3,700	0	93,700	0	Shaul	10,300 chums below forks, 48,400 chums in lefthand, rest in righthand, 700 sockeye in lake

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Table 51. (page 6 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
312-40.02	Moffet Springs Creek	06-Jul	188	Good	0	0	0	400	0	Shaul	All fish in lower 1/2 mile
		27-Jul	209	Excel.	0	0	0	1,200	0	Shaul	All fish schooled below forks
		05-Aug	218	Good	0	100	0	5,000	0	Shaul	
		19-Aug	232	Poor	0		0	4,600	0	Shaul	Lower stream muddy, probably twice as many fish
		02-Sep	246	Excel.	0	100	0	14,900	0	Shaul	12,000 schooled
312-40.03	Moffet Creek	06-Jul	188	Good	0	0	0	400	0	Shaul	300 sockeye below forks
		27-Jul	209	Good	0	400	0	1,700	0	Shaul	
		05-Aug	218	Good	0	1,000	0	3,300	0	Shaul	
		19-Aug	232	Poor	0	2,000	0	12,300	0	Shaul	Sockeye spawning, lower muddy, probably more chums
		02-Sep	246	Excel.	0	500	0	15,900	0	Shaul	
NORTHERN DISTRICT											
313-10.02	North Creek	09-Jul	191	Fair	600	0	0	0	0	Shaul	
		25-Jul	207	Good		6,300	0	6,500	0	Shaul	Chums in B, 4,100 sockeye in C2 & 2,200 in C lake
313-10.05	Cathedral River	25-Aug	238	Good	600	0	0	0	0	Shaul	Partial survey of lake only
313-10.06	Trader Mt.	25-Aug	238	Good	0	0	180	80	0	Shaul	Survey of East clear tributary, all spawning
313-10.11	Black Hills	09-Jul	191	Good	1,100	0	0	0	0	Shaul	
313-10.14	Steelhead	09-Jul	191	Good	1,600	0	0	0	0	Shaul	

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Table 51. (page 7 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
313-30.01	David's River	07-Jul	189	Good	400	2,500	0	0	0	Shaul	All schooled & coloring, fish above Maxie's
		26-Sep	270	Good	0	8,000	0	0	700	Shaul	Cherokee survey, coho count low, 200 sockeye in upper L, 1,800 sockeye in lake 3 m above Maxie's, 500 in lake by Maxie's
313-30.02	Caribou River	19-Jul	201	Good	0	1,450	0	0	0	Shaul	Survey of Trader Mountain spawning area, 150 schooled in Divide Lake & turing color, rest below
313-30.03	Nelson River	11-Jun	163	Poor	0	0	0	0	0	Berceli	High water conditions in river
	Hoodoo Lake[1]	09-Jul	191	Good	1,300	300	0	0	0	Shaul	Good visibility above trappers cabin, count probably low, chinook count from tower to trappers cabin, tower cumulative chinook count of 573
		19-Jul	201	Good	2,900		0	0	0	Shaul	Counted chinook only, 900 below tower
		25-Aug	238	Excel.			0	11,000	2400	Shaul	Counted only coho & chums, few chinook remaining, probably twice as many sockeye and chums spawning
		30-Aug	243	Good			0		6,500	Shaul	2,800 coho above the tower
		25-Sep	269	Good	0	0	0	0	10,500	Shaul	Cherokee survey, good sign in lower river
		26-Sep	270	Poor	0	0	0	0	17,000	Shaul	Most in 1st m below left creek, probably 3-4,000 more in the system, but poor light conditions

-Continued-

Table 51. (page 8 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
313-30.03	Petterson	Not Surveyed									
313-30.??	Coastal Lake	26-Sep	270	Good	0	2,200	0	0	0	Shaul	1,500 sockeye spawning in Coastal lake, rest in Drill Hole Lake
314-20.02	Doe Valley	19-Jul	201	Good	0	0	0	10	0	Shaul	400 chums at stream mouth
		13-Aug	226	Good	0	0	0	700	0	Schwarz	Additional 500 carcasses
314-20.03	Buck Valley	19-Jul	201	Good	0	0	0	50	0	Shaul	100 chums at stream mouth
		13-Aug	226	Good	0	0	0	2,000	0	Schwarz	
314-20.04	Deer Valley	16-Jul	198	Good	0	0	0	20	0	Probasco	Jumpers off stream mouth
		19-Jul	201	Good	0	0	0	900	0	Shaul	400 chums at stream mouth
		13-Aug	226	Good	0	0	0	5,800	0	Schwarz	Additional 200 carcasses
314-20.05	Portage Valley	16-Jul	198	Good	0	0	0	0	0	Probasco	No sign of fish in the bay
314-20.06	Grass Valley	16-Jul	198	Good	0	0	0	20	0	Probasco	50 chums at stream mouth
		19-Jul	201	Good	0	150	0	150	0	Shaul	1,500 chums at stream mouth
		13-Aug	226	Good	0	200	0	11,600	0	Schwarz	400 chums at stream mouth
314-20.07	Lawrence Valley	16-Jul	198	Good	0	0	0	5	0	Probasco	200 chums at stream mouth
		19-Jul	201	Good	0	0	0	300	0	Shaul	2,000 chums at stream mouth
		13-Aug	226	Good	0	0	0	3,400	0	Schwarz	200 chums at stream mouth, fair escapement
314-20.08	Mine Harbor	13-Aug	226	Good	0	0	0	150	0	Schwarz	200 chums at stream mouth

-Continued-

Table 51. (page 9 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
314-20.09	Coal Creek	16-Jul	198	Fair	0	0	0	0	0	Shaul	3,000+ chums at stream mouth, jumpers along beach
		19-Jul	201	Good	0	0	0	300	0	Shaul	2,000 chums at stream mouth
		13-Aug	226	Good	0	0	0	2,500	0	Schwarz	Additional 200 carcasses
314-30.04	Mud Bay	19-Jul	201	Good	0	0	0	900	0	Shaul	
		13-Aug	226	Good	0	0	0	4,000	0	Schwarz	Additional 125 carcasses
314-30.05	Mud Bay	19-Jul	201	Good	0	0	0	300	0	Shaul	
		13-Aug	226	Good	0	0	0	2,600	0	Schwarz	
314-30.07	Right Head	13-Aug	226	Good	0	0	0	215	0	Schwarz	
314-30.09	Right Head	19-Jul	201	Good	0	0	0	150	0	Shaul	150 chums at stream mouth
		13-Aug	226	Good	0	0	0	6,600	0	Schwarz	
314-30.10	Left Head Creek	19-Jul	201	Good	0	0	0	100	0	Shaul	
		13-Aug	226	Good	0	0	0	2,300	0	Schwarz	
315-10.01	Frank's Lagoon	26-Jun	178	Good	0	0	0	1,300	0	Shaul	All fish in lagoon, most on north side
		16-Jul	198	Poor	0	0	0	400	0	Probasco	Couldn't survey creek, fish at mouth of creek
		13-Aug	226	Good	0	0	0	155	0	Schwarz	All fish in creek, lagoon blocked at low tide
315-10.02	King Salmon	26-Jun	178	Good	0	0	0	0	0	Shaul	
		05-Jul	187	Excel.	200	0	0	0	0	Shaul	
		16-Jul	198	Poor	754	0	0	0	0	Probasco	
		17-Aug	230	Good	135	0	0	0	0	McCullough	Plus 25 chinook carcasses

-Continued-

Table 51. (page 10 of 14)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
315-11.02	Bear River C & E[2]	26-Jun	178	Excel.	0	9,000	0	0	0	Shaul	Partial survey of mouth to weir, 5,300 sockeye below
		19-Jul	201	Good	150		0	0	0	Shaul	Partial survey of C tributary
		13-Aug	226	Good	570		0	0	0	Schwarz	35 chinook in C, remainder in D
315-12.00	Sandy River & Lake	26-Jun	178	Good	0	11,000	0	0	0	Shaul	8,500 from tower & lake, rough estimate below tower
		19-Jul	201	Good	300	34,500	0	0	0	Shaul	Chinook estimate rough, 1,500 sockeye in clear water of upper Sandy, remainder schooled in the lake
316-10.01	Lime Creek	26-Jun	178	Good	0	0	0	0	25	McCullough	Surveyed lagoon as it parallels beach
316-10.02	Unnamed	Not Surveyed									
316-10.04	Three Hills	21-Jul	203	Good	0	30	0	0	0	Shaul	Survey of lake only
316-10.05	Ocean River	26-Jun	178	Good	0	1,300	0	0	0	Shaul	All fish 2 m below Finger Lake
		05-Jul	187	Good	0	2,600	0	0	0	Shaul	2,400 in Wildman Lake, remainder at stream bend near Three Hills
		21-Jul	203	Good	200	5,300	0	0	0	Shaul	2,200 schooled in Wildman Lake, Chinook and 3,100 sockeye carcasses in Finger Lake
		26-Sep	270	Good	0	0	0	0	7,000	Shaul	3,000 schooled in Wildman, 1,000 at mouth of Wildman tributary, remainder in river

-Continued-

Table 51. (page 11 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
316-10.06	Willie Creek	26-Jun	178	Good	0	1,000	0	0	0	Shaul	Few fish begining to color
		05-Jul	187	Good	0	3,800	0	0	0	Shaul	300 were spawning
		21-Jul	203	Good	0	3,100	0	0	0	Shaul	1,700 spawning in spring area, remainder colored up in the lake
		26-Sep	270	Good	0	0	0	0	0	Shaul	Partial survey of spawning grounds
316-20.01	Ilnik Estuary & River	26-Jun	178	Excel.	0	8,800	0	0	0	Shaul	Partial survey of lagoon to village
		05-Jul	187	Poor	0	18,800	0	0	0	Shaul	Partial survey, counts low, 1,800+ in river
		21-Jul	203	Poor	0	10,800	0	0	0	Shaul	1,300 in lagoon, 3,700 spawning
		26-Aug	239	Good	0		0	0	0	McCullough	
		01-Sep	245	Good	0		0	0	4,000	Shaul	Partial survey of lower lake to markers
		26-Sep	270	Fair	0		0	0	8,500	Shaul	Low count missed most of river & lake, 3,000 coho in lower lake, 2,000 at mouth of C, 3,500 near spawning area, Cherokee survey
316-20.04	Unangashak River	26-Aug	239	Good	0	0	0	0	20	McCullough	Fish in two schools near stream mouth
		01-Sep	245	Good	0	0	0	0	6,000	Shaul	
317-2	Charles	26-Jul	208	Good	0	400	0	25	0	Fox	
317-4 A&B	Bluff Creek	21-Jul	203	Good	0	850	0	135	0	Barrett	
		26-Jul	208	Good	0	8,500	0	400	0	Fox	Some sockeye were likely chinook
317-6 A	Highland Creek	21-Jul	203	Good	0	0	0	0	0	Barrett	

-Continued-

Table 51. (page 12 of 14)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
317-7 A	Meshik River	21-Jul	203	Fair	0	2,480	0	0	0	Barrett	Surveyed mouth to Cub Creek
		28-Jul	210	Good	0	400	0	0	0	Fox	Fish in upper Meshik River, some sockeye likely chinook
		26-Aug	239	Good	0		0	0	450	McCullough	Surveyed mouth to 2 m above Scotty's Island
		01-Sep	245	Fair	0		0	0	17,500	Shaul	Poor visibility in lower 2 m, excellent above, count
317-7 B	Braided Creek	21-Jul	203	Fair	0	0	0	0	0	Barrett	
		26-Jul	208	Good	80	600	0	5,900	0	Fox	Some sockeye likely chinook
317-7 C	Landlocked Creek	21-Jul	203	Fair	0	0	0	550	0	Barrett	
		26-Jul	208	Good	0	4,800	0		0	Fox	
317-7 E	Blue Violet Creek	21-Jul	203	Fair	0	1,100	0	2,300	0	Barrett	Some sockeye likely chinook
		26-Jul	208	Good	15	5,500	0	4,900	0	Fox	Some sockeye likely chinook
317-7 F	Wolf Creek	21-Jul	203	Fair	0	200	0	2,100	0	Barrett	
		28-Jul	210	Good	0	800	0	2,650	0	Fox	
317-7 H	Shoe Creek	21-Jul	203	Good	0	220	0	1,700	0	Barrett	
		28-Jul	210	Good	0	75	0	2,400	0	Fox	
317-7 K	Unnamed	28-Jul	210	Good	0	2,400	0	1,100	0	Fox	
317-7 L	Unnamed	28-Jul	210	Good	0	1,100	0	800	0	Fox	
317-7 M	Unnamed	28-Jul	210	Good	0	80	0	20	0	Fox	

-Continued-

Table 51. (page 13 of 14)

Stream Number	Stream Name/Location	--Calendar-- Date	Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
317-7 N	Unnamed	21-Jul	203	Fair	0	450	0	0	0	Barrett	
		28-Jul	210	Good	0	2,500	0	0	0	Fox	
317-7 O	Plenty Bear Creek	21-Jul	203	Fair	0	10	0	5,700	0	Barrett	
		28-Jul	210	Good	0	500	0	5,000	0	Fox	Some sockeye likely chinook
317-7 O-A	Plenty Bear Creek	21-Jul	203	Fair	0	0	0	7,700	0	Barrett	
		28-Jul	210	Good	0	200	0	9,800	0	Fox	
317-7 P	Waterfall Creek	21-Jul	203	Poor	0	0	0	0	0	Barrett	Fish present but too turbid for counts
		28-Jul	210	Poor	0	0	0	0	0	Fox	
317-7 R	Rainbow Creek	21-Jul	203	Good	100	0	0	2,500	0	Barrett	
317-7 T	Cub Creek	21-Jul	203	Excel.	0	0	0	75	0	Shaul	
317-20.09	Barabaro Creek	Not Surveyed									
317-20.08	Birthday Creek	26-Jul	208	Good	0	0	0	630	0	Fox	
318-20.04	Mud Creek	26-Aug	239	Good	0	0	0	0	450	McCullough	
		01-Sep	245	Fair	0	0	0	0	6,000	Shaul	Lower mile muddy, probably more fish
318-20.06	Cinder River	04-Aug	217	Good	150	600	0	100	0	Wilkey	Chinook in lower portion of river
		26-Aug	239	Good	0	0	0	0	10	McCullough	20 coho at stream mouth
		01-Sep	245	Good	0	0	0	0	3,900	Shaul	All fish in lower mile of stream
318-20.06	Lava Creek	04-Aug	217	Good	20	800	0	75	0	Wilkey	

-Continued-

Table 51. (page 14 of 14)

Stream Number	Stream Name/Location	Calendar Date	Calendar Day	Survey Cond.	Species: Chinook	Sockeye	Pink	Chum	Coho	Observer	Remarks
318-20.06	High Creek	04-Aug	217	Good	0	10	0	0	0	Wilkey	
318-20.06	Meloy Creek	04-Aug	217	Good	15	400	0	1,500	0	Wilkey	
318-20.06	Wiggly Creek	04-Aug	217	Good	55	0	0	2,250	0	Wilkey	
318-20.06	Ray Creek	04-Aug	217	Good	30	0	0	300	0	Wilkey	
318-20.06	L Creek	04-Aug	217	Good	15	0	0	150	0	Wilkey	

[1]See Nelson River tower counts, and total escapement

[2]See Bear River tower counts, and total escapement

Table 52. SOUTH PENINSULA SOCKEYE INDEXED TOTAL ESCAPEMENTS BY SECTION, 1962-1987

	SOCKEYE SALMON				
Year	Northwest and Southwest Stepovak	Shumagin Islands	Mino Creek - Little Coal Bay	Pavlof Bay	Canoe Bay
1962	5,000	4,000	100	(500)	200
1963	7,600	2,700	100	(500)	0
1964	5,800	700	0	900	0
1965	6,000	2,100	0	1,500	0
1966	10,000	900	100	200	0
1967	6,200	4,000	0	400	0
1968	3,600	2,400	0	400	0
1969	19,200	1,600	200	500	0
1970	4,600	4,400	500	1,400	300
1971	11,100	2,800	500	1,300	0
1972	6,500	2,000	0	400	0
1973	1,200	1,000	0	500	0
1974	61,500	7,900	0	200	200
1975	22,300	11,600	500	1,600	1,600
1976	29,700	7,500	1,000	2,800	300
1977	17,000	9,200	2,000	4,500	500
1978	22,200	9,000	2,700	2,100	1,500
1979	20,000	13,000	200	1,100	1,500
1980	12,000	6,300	1,100	1,000	5,500
1981	18,000	4,000	500	5,500	2,000
1982	9,100	10,000	800	1,000	1,000
1983	21,500	10,000	1,600	1,100	5,000
1984	18,600	10,600	100	700	9,000
1985	14,000	7,800	500	900	1,000
1986	10,500	6,800	100	1,500	2,700
1987	11,400	2,000	500	1,200	1,300
1988	19,300	3,100	600	1,900	1,500

Figures in parenthesis are extrapolated estimates.

Table 52. (continued)

SOCKEYE SALMON

Year	Cold Bay	Thin Point	Morzhovoi Bay	Ikatan Bay
1968	2,300	2,200	1,500	400
1969	5,200	2,100	500	200
1970	1,000	1,100	(2,500)	700
1971	900	1,300	200	1,300
1972	1,100	1,300	200	400
1973	1,500	700	400	1,000
1974	3,500	16,000	5,300	1,000
1975	5,000	6,100	2,200	800
1976	4,900	20,500	1,700	1,300
1977	7,600	17,700	3,800	2,600
1978	14,700	7,400	2,600	(2,600)
1979	7,800	6,900	700	2,100
1980	4,800	12,000	1,300	1,000
1981	5,600	7,500	1,200	1,400
1982	2,600	8,800	4,200	1,700
1983	8,000	6,500	3,700	1,800
1984	6,600	7,000	500	1,800
1985	5,000	4,600	2,100	3,900
1986	1,800	12,400	5,500	1,800
1987	7,800	8,700	7,000	2,100
1988	9,500	23,500	7,300	2,300

Figures in parenthesis are estrapolated estimates.

Table 53. SOUTH PENINSULA INDEXED TOTAL ESCAPEMENTS BY SECTION

PINK SALMON

Year	Stepovak Flats & East Stepovak	Northwest and Southwest Stepovak	Balboa Bay	Shumagin Islands	Beaver Bay	Mino Creek - Little Coal Bay
1962	48,000	122,300	(24,500)	112,900	(17,500)	278,700
1963	87,000	197,000	53,800	52,000	21,700	290,100
1964	35,000	155,300	25,200	125,400	30,500	316,000
1965	100,000	160,700	32,000	50,900	8,400	255,100
1966	107,000	191,500	(70,000)	(83,000)	(10,000)	108,600
1967	53,200	67,000	25,100	32,000	1,800	73,000
1968	25,000	(75,000)	63,600	51,200	(8,000)	96,200
1969	180,000	369,300	187,200	112,900	29,400	484,900
1970	59,000	273,900	38,700	166,500	(15,000)	173,400
1971	15,700	101,200	13,600	32,000	(12,000)	190,100
1972	1,300	20,900	1,100	9,900	0	13,200
1973	9,500	17,500	(6,000)	12,000	(500)	21,500
1974	4,100	41,400	7,500	(40,000)	(6,000)	28,000
1975	20,000	110,000	8,000	52,200	2,500	90,400
1976	30,000	204,600	42,500	331,000	(14,000)	116,900
1977	101,400	360,000	92,700	299,600	82,500	662,000
1978	77,000	449,200	108,200	199,600	60,500	498,100
1979	40,000	302,400	133,600	(131,400)	65,700	648,100
1980	56,800	344,100	77,700	133,600	32,400	297,500
1981	78,800	460,000	82,000	89,600	53,600	700,000
1982	25,000	313,400	50,000	140,000	50,000	419,200
1983	42,700	115,300	27,300	51,700	4,000	160,400
1984	101,000	418,100	135,100	165,800	49,200	876,800
1985	34,200	216,300	34,500	125,600	23,300	380,200
1986	50,700	222,000	41,200	176,000	9,400	239,700
1987	89,100	290,500	58,100	174,700	48,800	321,700
1988	79,300	450,400	82,200	257,200	47,800	248,900

Figures in parenthesis are extrapolated estimates.

Table 53. (continued)

PINK SALMON

Year	Pavlof Bay	Canoe Bay	Volcano Bay	Belkofski Bay	Deer Island	Cold Bay
1962	213,200	9,000	5,000	95,300	229,100	(7,000)
1963	158,900	26,000	7,200	150,200	225,300	9,700
1964	205,000	(10,000)	5,100	(85,000)	201,000	24,500
1965	158,600	24,200	21,000	53,000	135,900	7,000
1966	55,200	2,100	0	30,000	32,600	13,300
1967	62,600	12,600	21,000	72,000	15,600	300
1968	132,600	76,500	(7,200)	54,000	67,000	97,600
1969	438,500	104,000	115,000	244,000	185,100	4,000
1970	186,500	94,900	10,500	65,800	120,500	29,200
1971	76,200	47,200	13,500	58,100	136,700	200
1972	29,400	6,000	7,000	8,000	7,000	1,100
1973	10,000	8,700	7,300	6,300	7,100	200
1974	106,800	4,800	3,000	10,100	16,100	8,200
1975	68,900	5,800	70,000	58,600	56,100	1,100
1976	267,000	78,000	117,600	109,600	47,800	50,100
1977	442,300	129,000	137,500	239,200	101,200	8,300
1978	395,700	178,000	193,800	221,200	184,000	76,900
1979	543,100	260,800	60,000	139,200	256,100	5,900
1980	425,200	43,100	56,200	230,200	350,200	49,600
1981	325,000	86,000	107,000	163,600	107,500	7,900
1982	462,300	73,300	41,900	106,300	157,700	95,100
1983	172,500	65,300	26,200	50,900	89,400	11,100
1984	708,800	72,000	143,600	207,000	446,000	143,200
1985	378,500	36,700	24,200	82,100	206,300	7,100
1986	403,800	42,600	78,800	111,600	181,500	29,900
1987	282,300	39,200	19,800	50,400	137,400	7,000
1988	390,000	80,700	127,500	250,100	482,000	33,900

Figures in parenthesis are extrapolated estimates.

Table 53. (continued)

PINK SALMON

Year	Thin Bay	Morzohvoi Bay	Ikatan Bay	Unimak District	Bechevin* Bay
1962	31,300	63,000	170,000	172,000	4,000
1963	(4,000)	15,000	(10,000)	(10,000)	4,400
1964	39,400	(41,000)	(110,000)	27,500	(15,000)
1965	13,700	6,100	5,000	3,800	900
1966	5,900	2,000	3,900	4,300	1,300
1967	5,100	2,500	700	(1,000)	500
1968	9,400	14,000	29,000	17,000	25,000
1969	14,700	1,000	3,500	1,400	2,100
1970	7,900	9,300	25,000	22,800	11,100
1971	3,600	800	1,500	300	8,400
1972	1,100	3,700	1,500	200	1,200
1973	4,000	(200)	0	(0)	(200)
1974	1,600	300	2,500	(4,000)	(23,000)
1975	5,200	2,100	1,000	200	500
1976	6,000	13,400	10,900	(17,000)	37,200
1977	5,100	8,100	9,500	400	6,200
1978	15,700	90,000	75,000	35,800	90,400
1979	6,000	9,000	24,400	3,800	9,300
1980	53,000	76,500	320,500	95,000	94,000
1981	18,200	9,500	17,300	800	5,700
1982	34,900	48,000	187,900	88,000	51,500
1983	15,700	4,400	13,500	800	3,900
1984	77,000	16,500	199,000	52,900	33,300
1985	30,300	8,500	10,500	15,900**	1,400
1986	39,700	14,800	58,500	16,400**	12,600
1987	7,500	2,900	5,800	5,300	1,100
1988	55,600	21,600	103,900	18,500	26,700

Figures in parenthesis are extrapolated estimates

* Bechevin Bay is considered part of the North Peninsula.

**Includes Sanak Island, which accounted for 15,500 and 5,400 during 1985 and 1986 respectively.

Table 54. SOUTH PENINSULA INDEXED TOTAL ESCAPEMENTS BY SECTION

CHUM SALMON

Year	Stepovak Flats & East Stepovak	Northwest and Southwest Stepovak	Balboa Bay	Shumagin Islands	Beaver Bay	Mino Creek - Little Coal Bay
1962	12,000	14,000	(43,700)	10,000	(6,000)	16,900
1963	29,400	71,900	43,900	1,200	0	300
1964	18,000	17,500	24,200	100	4,500	1,500
1965	60,000	23,500	29,900	1,100	200	100
1966	110,000	33,300	(100,000)	(0)	0	2,000
1967	15,700	5,500	27,100	1,100	3,300	0
1968	23,000	(11,100)	31,600	3,700	(6,500)	800
1969	6,000	9,400	16,400	2,400	9,800	0
1970	25,000	24,700	29,900	0	(15,000)	100
1971	56,100	49,900	26,500	300	(20,000)	200
1972	19,000	20,300	15,100	6,600	5,500	0
1973	27,000	4,500	8,700	4,400	(7,500)	800
1974	25,000	11,000	8,200	(1,500)	9,600	400
1975	24,000	43,100	(9,000)	8,300	4,900	1,500
1976	20,000	19,300	43,100	10,100	(10,400)	0
1977	126,200	47,300	55,300	14,000	15,000	0
1978	74,000	76,900	53,300	26,000	7,000	500
1979	(50,000)	50,400	28,500	(5,000)	200	0
1980	26,100	44,300	28,300	1,100	19,000	0
1981	34,000	23,900	42,000	5,500	13,000	0
1982	20,000	26,900	14,000	3,000	10,000	0
1983	40,200	51,100	46,600	11,800	10,700	0
1984	54,200	42,400	35,700	56,300	62,400	0
1985	34,800	16,900	17,500	24,300	18,800	0
1986	44,300	38,700	33,300	1,500	9,900	0
1987	91,000	28,100	35,600	12,600	5,600	4,100
1988	21,000	20,700	23,300	7,600	12,000	2,000

Figures in parenthesis are extrapolated estimates.

Table 54. (continued)

CHUM SALMON

Year	Pavlof Bay	Canoe Bay	Volcano Bay	Belkofski Bay	Deer Island	Cold Bay
1962	(26,500)	109,500	54,900	29,000	0	(13,000)
1963	(10,000)	106,300	17,900	104,600	0	46,400
1964	(25,000)	70,000	70,400	51,700	0	114,300
1965	(15,000)	73,500	6,300	7,000	0	10,400
1966	(20,000)	89,500	29,900	11,000	0	14,300
1967	(12,000)	68,100	19,100	21,000	0	5,500
1968	23,300	91,700	(8,700)	29,500	0	31,400
1969	(5,000)	47,900	2,000	10,000	0	20,100
1970	13,000	64,000	25,200	36,500	0	34,100
1971	(15,000)	31,100	24,100	65,500	0	25,600
1972	8,100	70,400	16,000	37,300	0	25,700
1973	19,500	58,500	16,000	34,400	0	11,600
1974	(22,000)	92,100	27,400	29,100	0	16,400
1975	8,200	61,200	11,500	4,800	0	8,200
1976	17,500	104,900	29,500	30,000	0	24,300
1977	60,100	183,000	76,000	60,300	0	85,000
1978	43,100	105,400	54,600	32,500	0	103,600
1979	(17,000)	151,600	41,500	17,800	0	17,300
1980	15,600	107,200	11,900	31,500	0	50,600
1981	13,600	102,500	30,400	34,900	0	50,400
1982	9,900	119,200	56,000	24,100	0	74,600
1983	12,000	156,500	37,700	16,900	0	33,500
1984	29,500	165,500	79,800	50,500	0	78,000
1985	22,300	150,100	49,300	31,100	0	75,200
1986	23,100	88,800	82,000	64,700	0	111,800
1987	43,000	109,200	69,900	57,400	0	89,100
1988	44,600	136,800	28,400	63,100	0	101,900

Figures in parenthesis are extrapolated estimates.

Table 54. (continued)

CHUM SALMON

Year	Thin Bay	Morzohvoi Bay	Ikatan Bay	Unimak District	Bechevin* Bay
1962	14,200	7,700	42,000	0	48,500
1963	(9,000)	4,800	(1,000)	(0)	22,300
1964	19,500	37,100	(1,000)	0	(16,000)
1965	500	500	0	0	(1,800)
1966	3,000	7,700	700	600	10,000
1967	600	3,700	200	(0)	15,400
1968	3,100	12,700	2,000	0	19,800
1969	200	5,200	0	200	8,000
1970	6,300	6,400	300	0	(5,600)
1971	8,600	20,000	300	0	5,900
1972	17,000	12,900	400	200	11,200
1973	10,900	8,000	200	(500)	(7,500)
1974	5,200	7,900	1,000	(500)	(6,100)
1975	800	7,800	0	0	17,300
1976	7,400	9,900	200	(600)	38,300
1977	26,300	25,300	0	1,100	54,300
1978	10,400	13,000	200	0	29,500
1979	17,500	12,000	1,800	500	12,400
1980	11,800	14,000	0	1,000	41,000
1981	19,500	11,500	0	100	29,600
1982	15,000	14,000	200	0	20,100
1983	21,300	7,700	500	0	15,500
1984	23,000	22,400	0	0	30,400
1985	44,000	19,200	0	0	21,900
1986	39,600	6,500	0	100	15,500
1987	51,300	23,400	0	400	34,700
1988	17,500	10,100	5,200	1,100	25,000

Figures in parenthesis are extrapolated estimates

* Bechevin Bay is considered part of the North Peninsula.

Table 55. INDEXED TOTAL ESCAPEMENTS OF CHUM SALMON IN SOME MAJOR NORTH PENINSULA PRODUCTION AREAS (Fish in Thousands)

Year	Frank's Lagoon	Moller Bay	Herendeen Bay	Nelson Lagoon	Moffett Bay	Izembek Bay	St. Catherine Cove
1960	3.0	27.1	52.5	-	76.4	18.0	5.2
1961	3.5	14.4	24.0	9.1	-	11.0	-
1962	1.5	2.0	16.4	9.7	-	48.0	21.6
1963	0.5	6.4	13.5	7.0	91.5	44.0	6.6
1964	2.2	11.0	25.5	2.0	55.5	42.0	-
1965	1.2	-	5.6	4.0	-	9.5	0.6
1966	0.7	10.7	45.5	17.0	-	19.5	5.0
1967	-	-	19.3	29.8	17.8	15.0	3.6
1968	6.0	(3.6)	45.5	18.1	89.3	52.8	4.4
1969	-	-	10.0	13.0	72.3	23.0	6.3
1970	0.5	11.6	31.2	36.0	(32.3)	25.1	3.1
1971	0	4.4	10.2	19.0	28.0	26.1	3.8
1972	4.3	-	6.0	16.8	29.1	36.7	5.9
1973	0.6	(1.4)	2.8	12.7	41.1	27.0	8.4
1974	1.3	-	2.8	8.3	34.1	41.9	3.5
1975	2.6	(1.2)	6.3	4.5	35.8	38.3	12.7
1976	6.4	9.1	19.4	42.5	90.8	36.5	5.4
1977	10.0	32.2	77.5	83.3	254.9	126.5	14.6
1978	-	(9.8)	64.3	10.2	85.7	48.4	12.0
1979	5.6	13.0	18.0	37.0	130.0	48.0	5.2
1980	17.8	37.2	79.0	164.0	289.3	74.8	13.1
1981	22.1	34.2	50.1	57.0	187.0	48.0	10.0
1982	41.8	8.8	(152.3)	29.1	130.4	38.6	10.8
1983	15.0	16.4	108.0	14.0	115.5	57.2	8.3
1984	6.8	18.6	222.7	49.0	354.2	73.3	7.7
1985	5.2	6.9	64.8	13.0	138.8	59.9	7.5
1986	5.7	11.3	44.5	0.8	121.1	21.3	6.3
1987	4.9	19.6	69.0	5.2	217.6	68.4	17.9
1988	2.0	17.2	59.4	11.0	237.3	67.1	10.7

- Insufficient data for estimate

() Estimate based on incomplete data.

Table 56. Sandy River Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	*	-	*	-
0.2	-	-	-	-	-	-	*	-	*	-
0.3	-	-	-	-	-	-	*	-	*	-
0.4	-	-	-	-	-	-	*	-	*	-
1.1	-	-	-	2.3	0.1	-	*	-	*	0.3
1.2	31.8	13.8	8.4	36.4	18.5	10.9	*	2.1	*	21.4
1.3	16.0	53.6	37.5	16.7	7.4	7.7	*	4.4	*	11.8
1.4	-	0.4	-	-	-	-	*	-	*	-
2.1	-	-	-	0.3	-	-	*	-	*	-
2.2	5.8	3.3	2.8	0.8	2.0	0.2	*	0.1	*	0.6
2.3	7.4	4.5	2.8	4.8	-	0.2	*	0.3	*	0.1
2.4	-	-	-	-	-	-	*	-	*	-
3.1	-	-	-	-	-	-	*	-	*	-
3.2	-	0.4	-	-	-	-	*	-	*	-
3.3	-	-	-	-	-	-	*	-	*	-
3.4	-	-	-	-	-	-	*	-	*	-
TOTAL	**61.0**	**76.0**	**51.5**	**61.3**	**28.0**	**19.0**	**11.5**	**6.9**	**8.7**	**34.5**

*No samples were collected in 1985 and 1987 due to high water on spawning grounds.

The 1988 information was obtained from scale samples, otoliths were used during previous years. Escapements are indexed totals.

Table 57. Bear River Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	-	-	-	-
0.2	-	-	-	-	-	-	-	-	-	-
0.3	-	-	-	-	-	-	-	0.3	-	-
0.4	-	-	-	-	-	-	-	-	-	-
1.1	6.7	7.6	-	2.5	0.1	8.5	0.8	-	-	0.1
1.2	40.3	34.9	128.9	4.5	6.6	12.1	16.1	9.5	6.5	1.1
1.3	3.1	9.4	37.8	15.4	2.1	4.9	30.2	12.6	33.9	14.9
1.4	-	-	-	-	0.3	0.4	-	-	0.2	0.1
2.1	95.1	44.3	14.6	55.9	40.3	141.7	36.8	3.2	0.5	28.7
2.2	660.7	480.4	397.1	95.9	154.4	167.7	299.7	159.1	132.8	126.0
2.3	144.6	93.3	111.5	125.7	119.6	59.3	52.9	88.3	77.5	138.9
2.4	-	-	-	-	1.4	-	1.5	0.4	1.0	0.2
3.1	-	-	-	-	-	-	-	-	-	-
3.2	-	0.9	-	0.1	4.7	-	2.0	-	-	0.1
3.3	1.5	-	-	-	0.4	-	-	-	-	-
3.4	-	-	-	-	-	-	-	-	-	-
TOTAL	952.0	670.8	689.9	300.0	329.9	394.6	440.0	273.4	252.4	310.1

Table 58. Nelson (Sapsuk) Sockeye Escapement Age Composition. (Fish in thousands)

Age Class	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
0.1	-	-	-	-	-	-	-	-	-	-
0.2	-	-	-	-	-	-	-	-	-	-
0.3	-	-	-	-	-	-	-	0.7	-	0.8
0.4	-	-	-	-	-	-	-	-	-	-
1.1	2.3	6.7	-	16.2	0.4	1.0	-	-	-	1.7
1.2	52.2	13.8	28.6	0.6	4.1	14.0	13.2	1.8	26.9	25.3
1.3	-	66.0	16.3	11.4	7.9	34.1	14.5	9.2	14.2	19.7
1.4	-	-	-	-	0.4	-	-	-	-	-
2.1	49.7	13.8	9.0	13.9	5.2	41.8	42.8	2.8	0.8	17.7
2.2	146.7	191.2	152.9	14.7	41.0	94.4	210.9	18.4	96.4	36.6
2.3	55.9	43.9	36.9	114.8	40.2	58.8	32.9	83.9	3.9	32.6
2.4	43.3	-	-	-	-	-	-	0.2	-	-
3.1	-	-	-	-	-	-	-	-	-	-
3.2	-	-	0.5	-	0.4	-	-	-	-	0.6
3.3	-	-	-	-	0.4	-	-	-	-	-
3.4	-	-	-	-	-	-	-	-	-	-
TOTAL	352.1	335.4	244.2	171.6	124.0	244.1	314.3	117.0	142.2	135.0

Table 59. 1988 Percent Age Composition of Sockeye Salmon Escapements.

Age Class	Urilia[a] Bay	Swanson[a] Lagoon	Ilnik[b] Lagoon	Meshik[b] River	Orzinski[c] Lake
0.1	-	-	-	-	-
0.2	8.2	0.2	1.7	4.0	-
0.3	21.9	0.6	40.6	28.4	-
0.4	2.2	-	1.5	41.1	-
1.1	-	-	0.2	-	-
1.2	9.6	10.2	5.8	0.9	11.0
1.3	55.5	70.1	43.0	9.3	51.0
1.4	-	-	2.0	12.0	-
2.1	-	0.1	0	-	-
2.2	0.7	3.6	0.9	0.6	12.0
2.3	1.9	15.0	3.9	1.5	26.0
2.4	-	-	0.4	2.2	-
3.1	-	-	-	-	-
3.2	-	0.2	-	-	-
3.3	-	-	-	-	-
3.4	-	-	-	-	-
Sample Size	**324**	**828**	**537**	**324**	**100**

[a]Samples were taken from commercial fishery which was dominated by seine gear.

[b]Escapement samples.

[c]Samples were collected from set gill net catch at head of Orzinski Bay.

Table 60. URILIA BAY AND ILNIK LAGOON SOCKEYE PERCENT AGE COMPOSITION, 1986-1988

URILIA BAY

Year	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.2	2.3	2.4
1986	1.1	45.1	0.1	0	3.6	48.1	0.5	0.1	1.4	0
1987	0.2	50.7	0	0	6.5	39.5	1.4	0	0.5	0
1988	8.2	21.9	2.2	0	9.6	55.5	0	0.7	1.9	0

ILNIK LAGOON

Year	0.2	0.3	0.4	1.1	1.2	1.3	1.4	2.2	2.3	2.4
1986	0.9	53.9	0	0	1.3	37.3	0.1	0.9	5.5	0
1987	2.3	40.7	7.0	0	1.2	44.2	1.2	1.2	2.3	0
1988	1.7	40.6	1.5	0.2	5.8	43.0	2.0	0.9	3.9	0.4

Table 61. 1988 Percent Age Composition of Chum Salmon Escapements[a].

SOUTH PENINSULA

Age Class	Canoe Bay	Cold Bay
0.2	1.5	1.4
0.3	38.8	80.7
0.4	57.0	16.8
0.5	2.7	1.1
Sample Size	**1,240**	**1,693**

NORTH PENINSULA

Age Class	Bechevin Bay and Swanson Lagoon	Izembek-Moffet Bay	Herendeen Bay
0.2	0.3	0.2	0.4
0.3	41.4	32.7	38.8
0.4	55.6	65.2	59.5
0.5	2.7	1.9	1.3
Sample Size	**371**	**2,079**	**1,130**

[a]Samples were collected from seine dominated commercial fisheries in terminal locations.

Table 62. 1988 ALASKA PENINSULA AREA ESTIMATED SUBSISTENCE SALMON CATCHES

Community	Permits Issued	Permits Returned	Percent Returned	Projected Catch (Fish) King	Sockeye	Coho	Pink	Chum	Total
Sand Point	74	52	70.3	146	2,694	853	1,326	1,175	6,194
King Cove	28	10	35.7	3	555	2,855	265	43	3,721
Cold Bay	24	9	37.5	0	737	66	2	0	805
False Pass	10	7	70.0	11	401	834	29	192	1,467
Nelson Lagoon/ Port Moller	13	9	69.2	26	284	184	0	25	519
Port Heiden	10	9	90.0	69	268	134	23	105	599
Sub-Total	159	96	60.4	255	4,939	4,926	1,645	1,540	13,305
Non Local Alaska Residents	24	18	75.0	2	562	720	21	152	1,457
Total Alaska Peninsula Area	**183**	**114**	**62.3**	**257**	**5,501**	**5,646**	**1,666**	**1,692**	**14,762**
Unalaska									
Local Residents	74	43	58.1	1	962	390	2,626	83	4,062
Non Local Alaska Residents	3	2	66.7	2	4	0	1	0	7
Total Unalaska	**77**	**45**	**58.4**	**3**	**966**	**390**	**2,627**	**83**	**4,069**

AVERAGE SUBSISTENCE SALMON CATCH PER SUCCESSFUL PERMIT

Community	Kings	Sockeye	Coho	Pink	Chum	Total
Sand Point	3.2	52.7	15.8	25.1	22.4	119.2
King Cove	0.1	22.2	114.2	10.6	1.7	148.8
Cold Bay	0	34.6	3.1	0.1	0	37.8
False Pass	1.2	44.5	92.7	3.2	21.3	162.9
Nelson Lagoon/Port Moller	2.9	32.0	20.4	0	2.8	58.1
Port Heiden	9.8	38.3	19.2	3.3	15.0	85.6
Unalaska	0	18.5	7.5	50.5	1.6	78.1
Non Local Alaska Residents	0.2	30.4	3.9	1.1	8.1	43.7

Table 63. 1988 Thin Point Cove Sockeye and Coho Harvests

Subsistence Fishery

Estimated Permit Holders[a]	Sockeye	Coho
17	488	2,196

Commercial Fishery

Permit Holders[b]			
8		3,574	10,436
	Total Harvest	4,062	12,632

[a]The number of subsistence permit holders fishing Thin Point Cove and the number of fish caught are extrapolated from permit returns. All subsistence fishermen fishing Thin Point Cove during 1988 are estimated to be King Cove residents.

[b]The commercial information came from fish tickets.

The indexed total sockeye escapement was 23,500. This figure is probably close to but slightly under the actual figure. Coho escapement data was not sufficient to make an estimate.

Table 64. 1988 Mortensen's Lagoon Subsistence and Commercial Sockeye-Coho Harvests.

	Estimated Permits	Sockeye	Coho
Cold Bay Residents	21	737	66
King Cove Residents	0	0	0
Out of Area Residents	0	0	0
Total	21	737	66

The number of permit holders fishing Mortensen's Lagoon and number of fish caught are extrapolated from returned permits.

	Boats	Sockeye	Coho
Commercial Catch	3	335	0

The commercial catch includes all of statistical area 283-32, some of the fish may be going to other systems.

	Sockeye	Coho
Estimated Escapements	6,000	-

The sockeye escapement is an indexed total, probably close but perhaps slightly lower than the actual. Coho escapement data was not sufficient to make an estimate.

Table 65. ESTIMATED MORTENSEN LAGOON, THIN POINT COVE, AND REESE BAY SUBSISTENCE SALMON HARVESTS, 1982 - 1988.

Year	Mortensen's Lagoon (Estimated) Permits	Sockeye	Cohos	Thin Point Cove (Estimated) Permits	Sockeye	Cohos	Reese (Wislow) Bay (Estimated) Permits	Sockeye
1982	30	590	1,145	-	-	-	-	-
1983	41	300	1,600	-	-	-	-	-
1984	27	745	500	-	-	-	-	-
1985	22	590	831	-	-	-	23	669
1986	12	362	178	15	1,568	656	54	2,824
1987	22	604	254	15	1,226	966	20	806
1988	21	737	66	17	488	2,196	21	792
Average	25	561	653	16	1,094	1,273	30	1,273

Table 66. 1988 Reese Bay (Unalaska Island) Subsistence Sockeye Catch.

Estimated Permits[a]	Sockeyes
21	792

[a]The number of permit holders and number of fish caught are extrapolated from returned permits.

Table 67. 1988 Estimated Adak-Kagalaska Islands Personal Use Salmon Catches.

Permit Holders	43
Number of Returned Permits	29 (67%)
Number of Returned Permits Reporting Catch[a]	17 (59% of returned permits)
Estimated Number of Permit Holders That Caught Salmon	25

Average Catch Per Permit Holder

Kings	Sockeye	Coho	Pinks	Chums	Total
0	20.1	0.9	6.0	3.6	30.6

Estimated Total Catch

Kings	Sockeye	Coho	Pinks	Chums	Total
0	503	23	150	0	676

[a]Approximately 477 of the sockeye catch is estimated to have been taken at Quail Bay on Kagalaska Island.

HERRING

Herring fisheries that have occurred in the Alaska Peninsula-Aleutian Islands Area may be broken down into the following:

(1) Eastern Aleutian summer food/bait

(2) South Peninsula winter food/bait

(3) South Peninsula sac-roe

(4) North Peninsula sac-roe

Other fisheries such as South Peninsula summer food/bait and Eastern Aleutians sac-roe may develop.

The South Peninsula winter food/bait fishery produced a harvest only during January and February of 1982 when 565 short tons were taken near Dent Point (Stepovak Bay). There was considerable effort by eight vessels during the winter of 1982-83 but no herring were landed. There has been no attempt to find winter herring since 1983.

Twenty-five percent of the allowable South Peninsula harvest is allocated (by the Board of Fisheries) to the food/bait season (whether summer or winter), with the balance allocated to the sac-roe fishery.

The Eastern Aleutians (also known as the Dutch Harbor fishery) food/bait, North Peninsula sac-roe, and South Peninsula sac-roe fisheries have all produced during at least each of the last six years.

More detailed information regarding Alaska Peninsula-Aleutian Islands herring fisheries is contained in reports to the Alaska Board of Fisheries (copies are on the following pages of this report).

PENINSULA/ALEUTIANS HERRING SAC-ROE FISHERY

REPORT TO THE BOARD OF FISHERIES

By:

Len Schwarz

Regional Information Report[1] No. 4K88-3

Alaska Department of Fish and Game
Division of Commercial Fisheries
211 Mission Road
Kodiak, Alaska 99615

November 1988

[1] The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. The reports frequently serve diverse ad hoc informational purposes or archive basic uninterrupted data. To accommodate timely reporting of recently collected information, reports in this series may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

AREA DESCRIPTION

The Peninsula/Aleutian Management Area is described as statistical Area "M", which includes South Peninsula and Aleutian waters west of Kupreanof Point to the International Date Line and North Peninsula waters extending from the International Date Line east to Cape Menshikof (Figure 1).

1988 SEASON SUMMARY

By regulation, the commercial herring sac-roe season in Area "M" extends from April 15 through July 15. However, for the first time the opening of the Port Moller District was delayed by emergency order until May 28. During the 1988 season commercial deliveries on the Alaska Peninsula occurred from May 28 through June 20. The total Peninsula harvest of 671 short tons (s.t.) was below the recent 5 year average of 866 tons; no sac-roe harvest occurred in the Aleutian Islands (Table 1). Fourteen purse seine vessels and 2 gillnet vessels made deliveries to the four companies that bought fish. The average roe recovery was 8.3%. The average price per ton was $1,000 for 10% roe recovery making the fishery worth approximately $557,000 to the fishermen.

NORTH PENINSULA

Historical Perspective:

The observed presence of commercial quantities of sac-roe herring on the North Peninsula has been centered around Port moller and Herendeen Bay. No commercial herring landings occurred in the area until 1982 when 506 tons were harvested (Table 1).

Prior to 1982, there had been reports that in some years herring were present during the spring near the Peter Pan dock in Port Moller, however abundance was unknown. Numerous schools of herring were documented in the Herendeen Bay Area during 1976 through department aerial surveys. The first year that aerial surveys were able to locate herring schools in Port Moller Bay (and thus document biomass estimates for both Moller and Herendeen Bay) was 1984. Fishing vessels destined for the Togiak fishery frequently stopped in the Port Moller Area in past years to prospect for herring, however there were no reported landings prior to 1982 (Table 1). Since 1982, a commercial sac-roe fishery has developed in both Moller and Herendeen Bays and along the Bering Sea coast eastward from Port Moller for a short distance (Table 2). The run timing of these stocks appear to be slightly later than the Togiak stocks.

1988 NORTH PENINSULA SUMMARY

The entire North Peninsula opened to commercial herring fishing by regulation on April 15, however the opening of the Port Moller District was delayed until May 28. The herring fishery occurred only in the Port Moller District (Figure 2) from May 28 to June 17 with 9 seiners landing 294 tons (Table 3). The average roe recovery was 8% with an average price of $1,000 for 10% roe recovery, with $100 for every percentage point above or below 10%. The North Peninsula fishery was worth approximately $235,000 to the fishermen.

As in 1986 and 1987, the closure of the Togiak fishery before the Port Moller fishery was underway resulted in a large fleet going

to Port Moller. There were 61, 40 and 55 purse seine vessels present for the 1986, 1987, and 1988 fisheries respectively. As in the past several years, only a small percentage of the vessels present actually made deliveries. Nine of the 55 vessels made deliveries in 1988. Also of the 10 registered companies represented by 22 tenders, only 3 companies bought herring.

Preseason:

Prior to the 1988 sac-roe herring season, a harvest guideline range of 500-1,000 tons was established in the Port Moller District. In 1986 a trend began of increasing fishing effort effectively harvesting fish that returned first. In order to shift fishing pressure from what may be earlier arriving smaller stocks, to a later arriving more abundant stock, the Port Moller District opening was to be delayed until May 28. A stipulation was added that the fishery would be opened if, due to run timing, a large biomass was spotted before May 28.

Fishery:

On May 27, the day before the scheduled opening, there were approximately 55 seine vessels on the grounds. Aerial surveys of the Port Moller District had been flown and very few fish had been spotted. In order to give fishermen an opportunity to harvest a small portion of the earlier arriving fish a 12 hour opening was announced for May 28. This opening resulted in a harvest of only 5 tons from Herendeen Bay. There were reports of several small schools of spawned out fish being caught and released in Moller Bay. Also juvenile herring were reported in Herendeen Bay.

Due to the extremely large fishing effort present and the absence of fish, further openings were delayed. By June 2 the fishing fleet was still large with 25 seine vessels present and still no significant spawning biomass.

The Department was concerned that a continued closure of the Port Moller District could result in a biomass moving into the district, spawning, and then leaving before they could be detected. This occurrence was possible because of muddy water, periods of time when flying is prohibited due to weather, and past fish behavior of entering and leaving the district rapidly. On the other hand, there was concern of overharvesting herring due to the large fishing effort present. In order to allow fishermen an opportunity to harvest fish and still protect against an overharvest, scheduled 3 hour daily test fishing periods were announced for June 2, 3, and 4.

On May 30 there were approximately 400 tons of herring spotted at the head of Herendeen Bay. Department ground crews with the aid of a commercial seine vessel documented these herring to be juveniles. To protect these fish and also provide less opportunity for a large overharvest, waters south of a line from Entrance Point to Point Divide to Black Point remained closed during the scheduled June 2, 3, and 4 openings.

No catches resulted from the openings on June 2, 3, and 4. Fishing effort had decreased only slightly to 20 seine vessels. No major biomass had been spotted, however about 200 tons of spawning herring were observed on a department survey in the closed waters of Moller Bay on June 3 (Table 4). In order to continue to provide fishermen an opportunity to harvest herring, the 3 hour daily test fishing schedule was continued. On June 6 the opportunity to harvest fish was again increased by reducing the closed water section of the district to just the head of Herendeen Bay in order to protect the juvenile fish that were present there (waters remaining closed were Herendeen Bay waters south of a line from Bold Bluff Point to Crow Point). Reducing the closed water area to provide more opportunity to harvest herring was justified because the harvest at this time was only 8 tons for the entire district. Although no major biomass had been spotted, spawned out fish were caught and released during the May

28 opening and 200 tons of spawning fish were observed on a survey June 3, indicating that some fish had entered the district, spawned, and left. The fishing effort was still fairly high with 11 seiners and 10 tenders on the grounds so the open daily fishing period remained limited to 3 hours to prevent an overharvest. The harvest remained low (8 tons) and fishing effort dropped to about 6 seine vessels and 3 tenders on June 8 so fishing time was increased to 24 hours/day.

The harvest in Moller Bay began on June 9 and continued until June 17 for a total Moller Bay harvest of 294 tons (Table 3). On June 17 Moller Bay waters were closed to prevent an overharvest. Although no accurate biomass estimates were made, it was speculated that based on test fishing results and aerial survey data, the Moller Bay biomass probably did not exceed 1,500 tons and that any additional harvest would exceed the desired harvest guideline of 20%. With the exception of Moller Bay and the head of Herendeen Bay, Port Moller District waters remained open to allow further harvest if a biomass did appear. No further deliveries were made after June 17.

From the narrative above, it can be seen that the Port Moller herring fishery can be difficult to manage. In the past, herring have arrived, spawned, and left quickly, often on one tide. Extremely muddy water and frequent poor weather make estimating biomass very difficult. These factors coupled with the tremendous fishing effort make it difficult to adequately estimate the herring biomass and exploit these stocks with the precision stated in the management plan (0-20%).

Biomass:

During the past 3 seasons intensive aerial surveys were conducted by the industry. Survey effort has ranged from 7 to 20 aircraft present, with 17 aircraft on the grounds in 1988. From May 17 through June 15 the Department flew 16 aerial surveys (Table 4). The largest herring biomass was observed at the head of Herendeen

Bay and was documented to be juvenile herring by a Department observer aboard a commercial seine vessel. Discounting the documented juvenile herring in Herendeen Bay (May 29 - June 3), the largest biomass was observed on May 23 when 615 tons were spotted. (Some of these fish may have been juveniles.) The next largest biomass was 217 tons observed on June 3. Industry spotters were not able to document a biomass larger than indicated on Department surveys.

A minimum spawning biomass estimate can be derived by adding the fish seen on May 23 (615 tons), the fish seen around Deer Island on May 26 (100 tons), the fish seen in Moller Bay on June 3 (217 tons), and the harvest which was made after June 8 (286 tons). This minimum estimate totals 1,218 tons. It is quite likely that additional fish were present but not counted. For example, two different spawning groups of fish were observed in Moller Bay. Moller Bay is often muddy and is not surveyed every day, so it is possible that additional fish spawned and left the area without being documented. Whether a large biomass of fish was present but not documented is possible but not very likely due to the intensive amount of survey effort present.

Biomasses greater than 1,500 tons are only documented sporadically in the Moller District. During 1985 and 1987 biomass estimates of 5,000 tons were obtained, although the 1985 estimate was questionable due to the presence of capelin and other schooling fish. The reason for the sporadic yearly appearance of a spawning biomass can be explained in several ways. As stated before it's possible that on certain years fish move in and out of the area quickly without being detected. Also it is possible that the herring do not return to the exact spot each year to spawn. For example, in Norton Sound, where yearly fish abundance and location lends itself more to documentation, large tonnages of fish will commonly change spawning location by 75 miles from year to year depending on the location of the ice pack. If yearly changes of this magnitude occurred in the Port Moller

District, it is possible that fish may be in Moller Bay one year and Izembek/Moffet, Nelson Lagoon, Ilnik, or Port Heiden the next year. Offshore spawning could also explain the yearly fluctuations of herring biomass in the Port Moller District. Whatever the reason, biomass estimates are widely variable from year to year. This year's minimum estimate of 1,200 tons does not come close to last year's estimate of 5,000 tons.

Age Class

The bulk of the harvest, which came from Moller Bay was supported by ages 4 and 5. These two year classes comprised almost 60% of the total samples (Table 5). This was expected as the bulk of the harvest was made up of 4 year old fish in 1987 (Table 6, Outer Moller).

SOUTH PENINSULA

Historical Perspective

The South Peninsula herring sac-roe fishery began to develop in 1979. Significant landings occurred in 1980 (453 tons), and peaked in 1981 (716 tons) (Table 1). A Board of Fisheries regulation closed the South Peninsula sac-roe fishery in 1983 in favor of a food and bait fishery. The food and bait fishery did not develop and the sac-roe season was reopened during the 1984 season. During the years in which a harvest occurred, landings were reported from 16 separate geographical locations, of these only Canoe Bay produced a harvest each year (Table 7). Beginning in 1984 the Board of Fisheries established that the fishery would be managed to allow a sac-roe as well as food and bait harvest. The sac-roe harvest was to be 75% of the allowable harvest with the remaining 25% allocated to the food and bait fishery. The food and bait fishery has not developed.

From 1981 through 1988 ADF&G has deployed field crews along the South Peninsula to gather biological data and to monitor the commercial fishery. Crews have been stationed in Canoe Bay each season (1981-1988) and intermittently in the other harvest locations or in locations of suspected commercial fishery potential. The crews have been successful in collecting samples and documenting spawning. Aerial fixed wing surveys have been utilized with limited success due to the large area involved and the sporadic and unpredictable appearance of the fish.

1988 South Peninsula Summary

Harvest guidelines were established preseason based on past fishing performance and general information on stock size gathered from Department and industry aerial surveys. After being closed for 2 years due to a trend in decreasing stock abundance, Stepovak Bay was opened for limited exploration. Areas where little information on stock size was known were left open for exploration.

The commercial sac-roe fishery on the South Peninsula occurred in 7 locations: Canoe Bay, Pavlof Bay, Lenard Harbor, Volcano Bay, Belkofski Bay, Balboa Bay, and Stepovak Bay (Table 1). As usual, the majority of harvest (63%) came from Canoe Bay. From May 14 to June 20, 376.8 tons were harvested by 5 seine vessels and 2 gillnet vessels. The gillnet harvest was less than 1 ton. The average roe recovery was 8.6% with an average price of $1,000/ton for 10% roe recovery making the value to the fishery approximately $324,000 to the fishermen.

The Board of Fisheries has directed the staff to permit 75% of the allowable harvest to be taken for sac roe and the remaining 25% for food and bait. Due to the small harvest guideline involved and the large harvesting potential of a purse seine vessel, the entire guideline may be taken before a closure can be announced. When this happens the area is closed for both sac-roe and food and bait so that the overall guideline will not be exceeded. This was the case in Canoe and Balboa Bays. Other South Peninsula waters were open for food and bait exploration but no catches were reported.

Intensive aerial surveys to document spawning biomass on the South Peninsula are not possible because of the large area involved, the sporadic and unpredictable appearance of fish, and because the fishery takes place during the middle of the June red salmon fishery when the availability of personnel is limited. Table 9 lists the surveys that were flown. Surface area of schools sighted is recorded in the form of R.A.I. (relative abundance index) units. R.A.I. units are an expression of total surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). No attempt is made to convert these units into tonnages due to the lack of conversion factors for deep waters. Many of the schools sighted were probably capelin, especially in Stepovak Bay where a seine vessel and spotter aircraft set on many capelin schools but could not find herring schools.

Age Class Composition

The dominant age class on the South Peninsula was age 4 (Table 10). This was not surprising as there was a good showing of 3 year old fish in 1987 (Table 11), An encouraging amount (25%) of 3 year old fish were represented throughout the South Peninsula in 1988. The 1988 fishery was largely supported by younger fish as opposed to the 1986 fishery which was supported by older fish (Figure 4).

Table 1. ALASKA PENINSULA-ALEUTIAN ISLAND AREA HERRING SAC-ROE HARVESTS (Short Tons)

Year	South Peninsula	Aleutian Islands	North Peninsula	Total
1979	10	-	-	10
1980	454	-	-	454
1981	716	-	-	716
1982	138	-	506	644
1983	-	-	627	627
1984	211	-	431	642
1985	345	-	716	1,061
1986	281	-	889	1,170
1987	319	-	512	831
1988	377	-	294	671

Table 2. ANNUAL HARVEST OF PORT MOLLER HERRING BY GEOGRAPHICAL AREA

Location	1982	1983	1984	1985	1986	1987	1988
Deer Island	-	-	-	73	41.5		-
Herendeen Bay	280	510	181	100	112.5	160.8[a]	8.2
Moller Bay	180	36	250	256	261.4	344.3	285.5
Bear River/E. Bering Sea Coast	46	81	-	287	473.5	7.3	-
TOTAL	506	627	431	716	888.9	512.4	293.7

[a]At least 11 tons were taken around Deer Island.

Table 3. 1988 NORTH PENINSULA COMMERCIAL SAC-ROE HERRING HARVEST
(Short Tons)

Date	Herendeen Bay		Moller Bay	
	Tons	Roe %	Tons	Roe %
May 28	4.8	9.0		
June 6	3.4	7.2		
June 9			66.9	7.3
June 10			6.9	5.7
June 12			6.7	8.6
June 16			136.0	8.5
June 17			69.0	9.0
SECTION TOTALS	8.2	8.2%	285.5	8.0%
NORTH PENINSULA TOTAL			293.7	8.0%

Table 4. 1988 ALASKA DEPARTMENT OF FISH AND GAME NORTH PENINSULA HERRING AERIAL SURVEYS BIOMASS ESTIMATES (Short tons)

Date	Deer Island			Herendeen Bay			Moller Bay			Bear River		
	RAI[a]	Tons[b]	Rating[c]	RAI	Tons	Rating	RAI	Tons	Rating	RAI	Tons	Rating
May 17	0	0	A	8	(20)	A	0	0	B	0	0	B
May 19	0	(0)	B	5	(13)	B	0	(0)	B	0	(0)	D
May 23	0	(0)	B	151	(390)	B	137	(225)	B	0	(0)	B
May 26	63	(100)	B	0	(0)	B		-			-	
May 27	5	(7)	B	19	(49)	C	0	(0)	B	0	(0)	C
May 28	0	(0)	B	0	(0)	C	0	(0)	B	-	-	-
May 29	5	(8)	B	45	(116)	C	0	(0)	B	0	(0)	B
May 30	15	(23)	C	153	(395)	B	0	(0)	C	0	(0)	C
May 31		-			-		0	(0)	C	0	(0)	B
June 1	0	(0)	C	270	(697)[d]	B	0	(0)	C	0	(0)	C
June 3	0	(0)	A	302	(780)	A	143	(217)	A	0	(0)	C
June 6	0	(0)	B	0	(0)	B	0	(0)	B	0	(0)	B
June 9		-		0	(0)	C	0	(0)	C		-	
June 10		-			-		0	(0)	B[e]	5	(8)	B[e]
June 11	0	(0)	B		-		0	(0)	B[e]		-	
June 15	0	(0)	C		-				C[e]		-	

R.A.I. units express the entire surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). For example 10 R.A.I. units is equivalent to 10 small herring schools each with a surface area of 538^2 ft.

[a]Relative Abundance Index: small school (less than 538^2 ft) = 1 R.A.I. unit
medium school (532^2 ft to $4,841^2$ ft) = 5 R.A.I. units
large school (square ft./538^2 ft)

[b]Tons: RAI units are multiplied by 1.52 (schools in water less than 16 ft.)
2.58 (schools in water 16 ft - 26 ft)

[c]Rating (of survey conditions): A) Excellent; B) Good; C) Fair; D) Poor; E) Unsatisfactory

[d]Documented as juvenile herring.

[e]Partial Survey

Table 5. NORTH PENINSULA SAC-ROE HERRING AGE CLASS COMPOSITION FROM COMMERCIAL SEINE SAMPLES, 1988

Date	Sample Size		Age Class 3	4	5	6	7	8	9	10	11+	Tons Harvested
HERENDEEN BAY SECTION												
May 28	181		6	41	55	45	16	8	5	3	2	4.8
June 6	31		-	7	8	2	3	-	2	4	5	3.4
TOTAL	212	%	3	23	30	22	9	4	3	3	3	8.2
INNER MOLLER BAY SECTION												
June 9	193		-	54	48	25	13	11	11	20	11	73.8
June 12	62		2	10	19	10	5	3	2	4	7	6.7
June 16	77		1	35	29	4	2	2	3	1	-	205.0
TOTAL	332	%	1	30	29	12	6	5	5	8	5	285.5

Table 6. PERCENT AGE CLASS COMPOSITION OF NORTH PENINSULA COMMERCIAL HERRING SAMPLES BY GEOGRAPHIC AREA BY YEAR

Year	AGE CLASS 3	4	5	6	7	8	9	10	11
HERENDEEN BAY									
1985	5	49	21	15	6	4	-	-	-
1986	-	3	25	13	20	21	17	1	-
1987	2	4	22	24	17	13	10	6	2
1988	3	23	30	22	9	4	3	3	2
INNER MOLLER BAY									
1985	1	12	8	15	33	27	2	-	1
1986	1	7	21	12	18	19	20	1	1
1987	2	11	13	22	12	11	17	11	-
1988	1	30	29	12	6	5	5	8	5
OUTER MOLLER/ BEAR RIVER									
1985	1	26	16	20	17	17	1	1	-
1986	-	2	22	13	21	23	18	1	-
1987	2	48	9	14	5	11	8	3	-
1988	-NO FISH HARVESTED IN THIS SECTION-								

Table 7. SUMMARY OF SOUTH PENINSULA HERRING SAC-ROE LANDINGS BY AREA

Location	1981	1982	1983[a]	1984	1985	1986[b]	1987	1988
Island Bay[c]	6							
Ramsey Bay[c]	27			30	11			.3[d]
Clarks Bay[c]	29		CLOSED					
Orzenoi Bay[c]	60							
American Bay[c]								
Balboa Bay	36	5	TO	25				11
Beaver Bay								
Little Coal Bay			SAC					
Pavlof	225				95	61	91.7	69.3
Canoe Bay	168	133	ROE	156	239	140.5	117.7	236.5
Volcano/Dolgoi Island	65		FISH			13		17
Iliasik Is.	6							
Belkofski Bay	9		ING			8	37.8	12
King Cove	7							
Lenard Harbor	78					59	59.5	30.7
Dolgoi Harbor							12.3	
TOTAL	716	138		211	345	281.5	319.0	

[a]The entire South Peninsula was closed to sac-roe herring fishing in 1983 i favor of a bait fishery that never developed.

[b]Stepovak Bay (Kupreanof Point to Swedania Point) was closed in 1986 an 1987 due to declining biomass trends.

[c]These bays are located inside Stepovak Bay

[d]Seven tons of green herring dumped on May 7, two tons dumped on May 11.

Table 8. 1988 SOUTH PENINSULA COMMERCIAL SAC-ROE HERRING CATCHES (Short Tons)

Area	Date	Tons	Roe %
Canoe Bay	May 31	24.4	7.0
	June 3	19.6	7.3
	June 5	41.3	9.3
	June 6	63.2	9.2
	June 8	40.0	9.7
	June 9	48.0	9.3
	TOTAL	236.5	8.9
Pavlof Bay	June 12	32.3	7.0
	June 15	25.0	7.2
	June 17	12.0	10.1
	TOTAL	69.3	7.6
Lenard Harbor	June 12	12.7	8.1
	June 18	18.0	9.1
	TOTAL	30.7	8.7
Volcano	June 18	17.0	8.1
Belkofski	June 20	12.0	10.1
Balboa	May 14	11.0	7.0
Stepovak[a]	June 14	.3	
	TOTAL	376.8	8.6%

[a]Not included in harvest totals are 7 tons of green fish taken but not sold May 7 and 2 tons taken on May 11.

Table 9. ALASKA DEPARTMENT OF FISH AND GAME SOUTH PENINSULA AERIAL SURVEYS[a] 1988

Area	Date	RAI[b]	Conditions
Canoe Bay	May 19	1	B
	June 6	115	B
	June 6	47	B
	June 11	39	A
	June 15	30	B
	June 16	71	B
	June 17	47	B
Balboa Bay	May 19	0	B
	May 20	26	B
	May 21	16	B
	June 2	121	B
Island Bay	May 21	57	C
	June 2	45	B
Granville	May 21	5	C
	June 2	45	B
Fox Bay	June 2	40	B
Dome Point	June 2	30	B
Pad Island	June 2	65	B
Ramsey Bay	May 21	1	C
	June 2	80	B
Grub Gulch	May 21	30	B
	June 2	40	B
Clark Bay	May 21	25	B
	June 2	20	B
Orzinski	May 21	15	B
American Bay	May 21	10	B
American	June 2	45	B
West Cove	May 19	3	B
Chicago	June 2	40	B
Dorenoi	May 21	7	B
	May 23	71	B
	June 2	50	B
San Diego	May 21	35	B
	May 23	30	B
	June 2	63	B
Gillemont	June 2	224	B
Swedania	May 21	5	B
Beaver	June 2	85	B
Pavlof	June 16	0	C

Table 9. (Continued) ALASKA DEPARTMENT OF FISH AND GAME SOUTH PENINSULA AERIAL SURVEYS[a] 1988

Area	Date	RAI[b]	Conditions
Arch Point	June 16	5	B
Dolgoi	June 16	15	B
Volcano	June 16	0	B
Bear Bay	June 16	5	B
Belkofski	June 16	5	B
Lenard	June 16	0	B

[a]Species identification is difficult, many of schools spotted probably were capelin.

[b]RAI = (Relative Abundance Index) units express the entire surface area of sighted herring schools in terms of small schools (surface area equal to 538^2 ft.). For example 10 RAI units is equivalent to 10 small herring schools each with a surface area of 538^2 ft.

Relative Abundance Index: small school (less than 538^2 ft) = 1 R.A.I. unit
medium school (532^2 to $4,841^2$ ft) = 5 R.A.I. units
large school (square ft/538^2 ft)

Tons: R.A.I. units are multiplied by 1.52 (schools in water less than 16 ft)
2.58 (schools in water 16 ft - 26 ft)

Rating (of survey conditions): A) Excellent; B) Good; C) Fair; D) Poor; E) Unsatisfactory

Table 10. SOUTH PENINSULA SAC-ROE HERRING AGE CLASS COMPOSITION FROM COMMERCIAL SEINE SAMPLES, 1988

Date	Area	Sample Size		Age Class									Tons Harvested
				3	4	5	6	7	8	9	10	11	
5/30	Canoe Bay	68		18	26	18	-	-	5	1	-	-	0
6/1		29		13	9	2	-	1	3	-	1	-	24
6/5		108		11	28	23	1	2	29	8	4	2	61
6/6		81		26	27	14	-	1	9	3	1	-	151
	TOTAL	286	%	24	31	20	-	1	16	4	2	1	
6/16	Pavlof	44	%	34	50	5	-	2	7	-	2	-	
5/15	Balboa	145	%	32	50	9	-	1	3	1	2	3	
5/6	Stepovak Flats[a]	90		4	70	16	-	-	-	-	-	-	
5/10		57		3	44	9	-	-	1	-	-	-	
	TOTAL	147											

[a]Gillnet samples, less than one ton was harvested in Stepovak Bay.

Table 11. PERCENT AGE CLASS COMPOSITION OF SOUTH PENINSULA COMMERCIAL HERRING SAMPLES BY GEOGRAPHIC AREA BY YEAR IN CANOE BAY

	AGE CLASS								
Year	3	4	5	6	7	8	9	10	11
1985	1	3	81	7	6	1	1	0	1
1986	6	-	3	82	6	2	-	1	-
1987	25	28	1	5	34	3	3	-	-
1988	24	31	20	-	1	16	4	2	1

Figure 1. ALASKA PENINSULA-ALEUTIAN IS. Boundaries in Geographical Relation to Western Alaska.

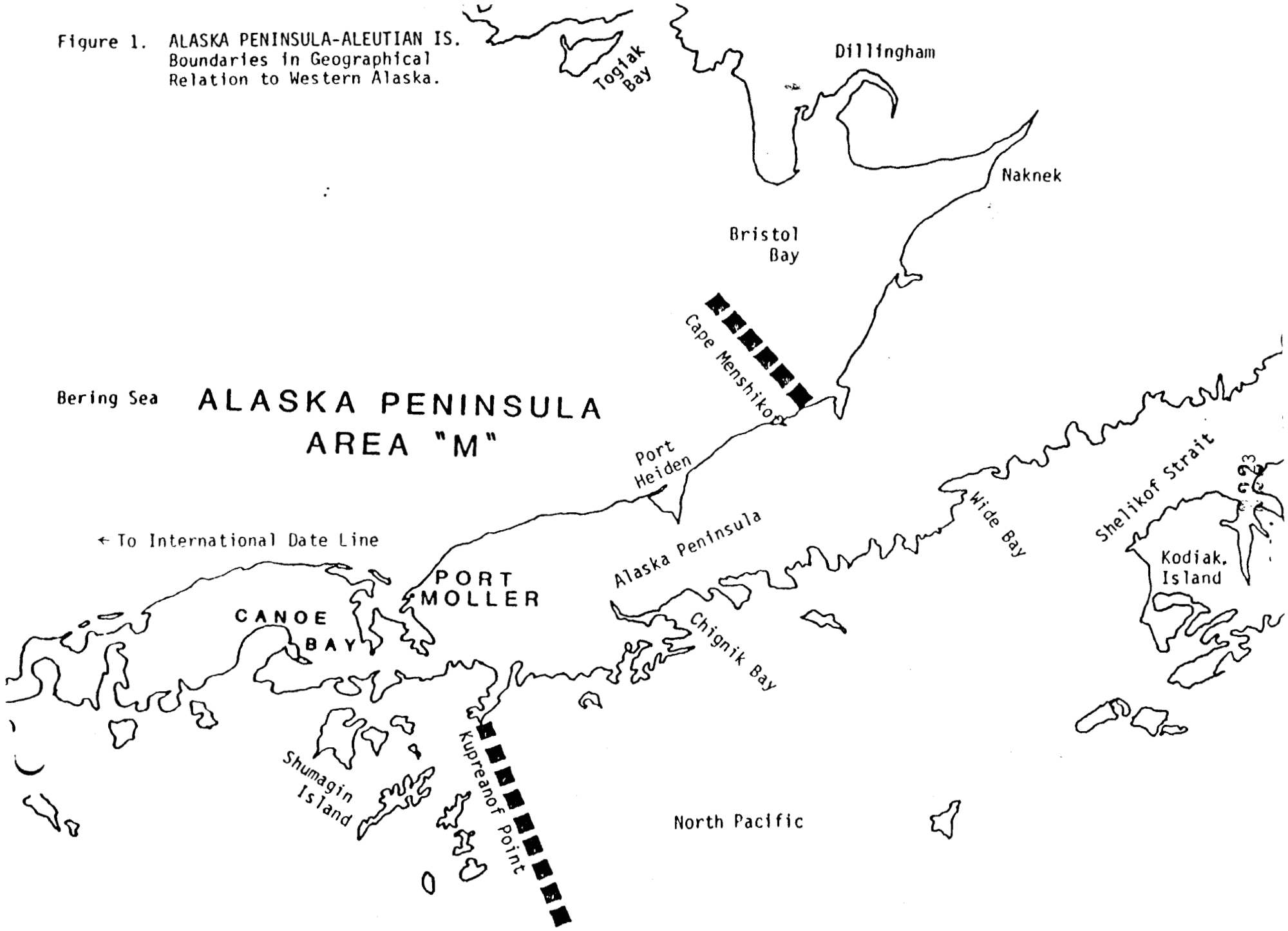


Figure 2. Location of Peninsula Sac-Roe Herring Landings, 1988

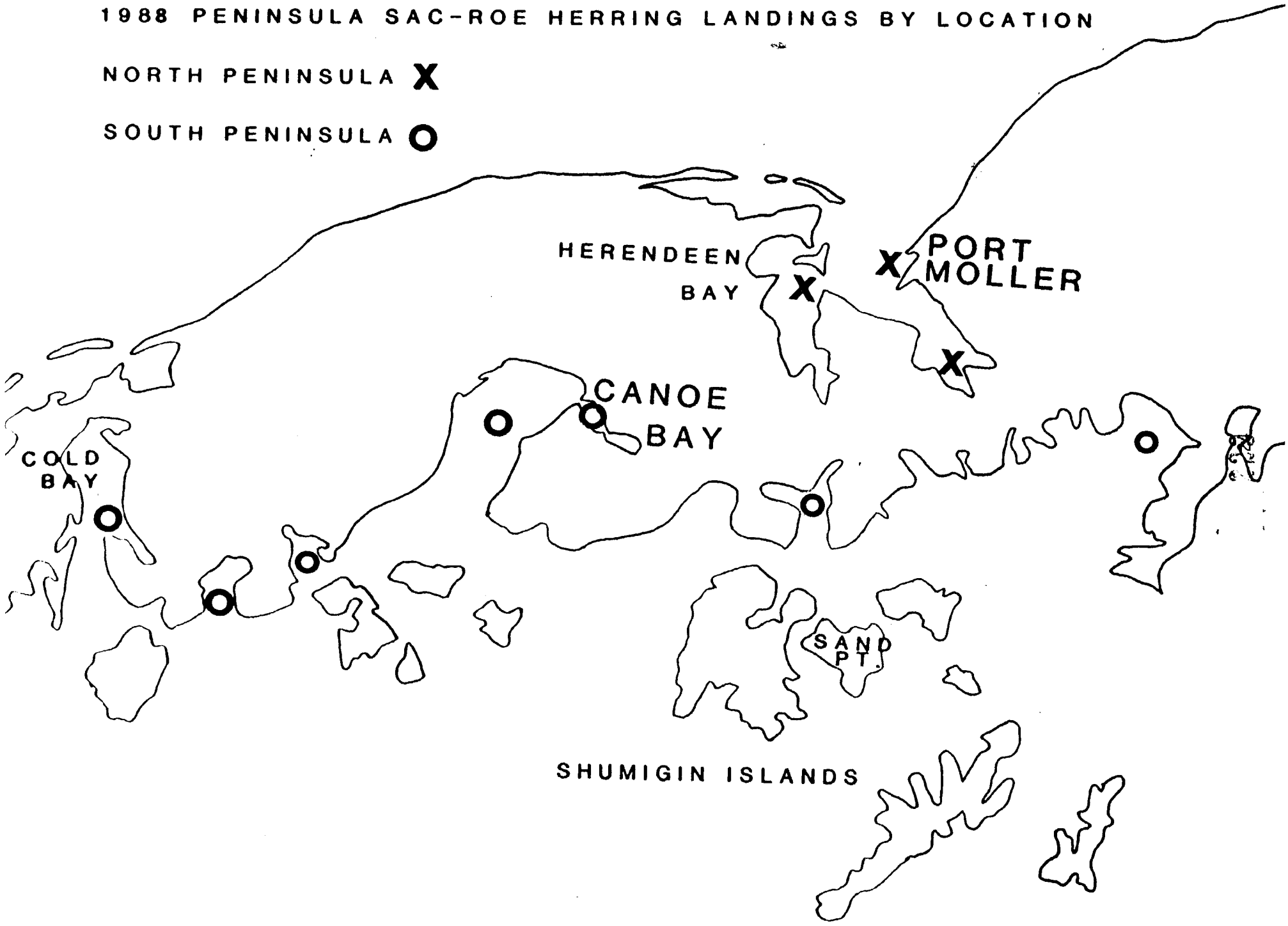


Figure 3. North Peninsula Commercial Sac-Roe Herring Age Frequency Comparisons by Area by Year.

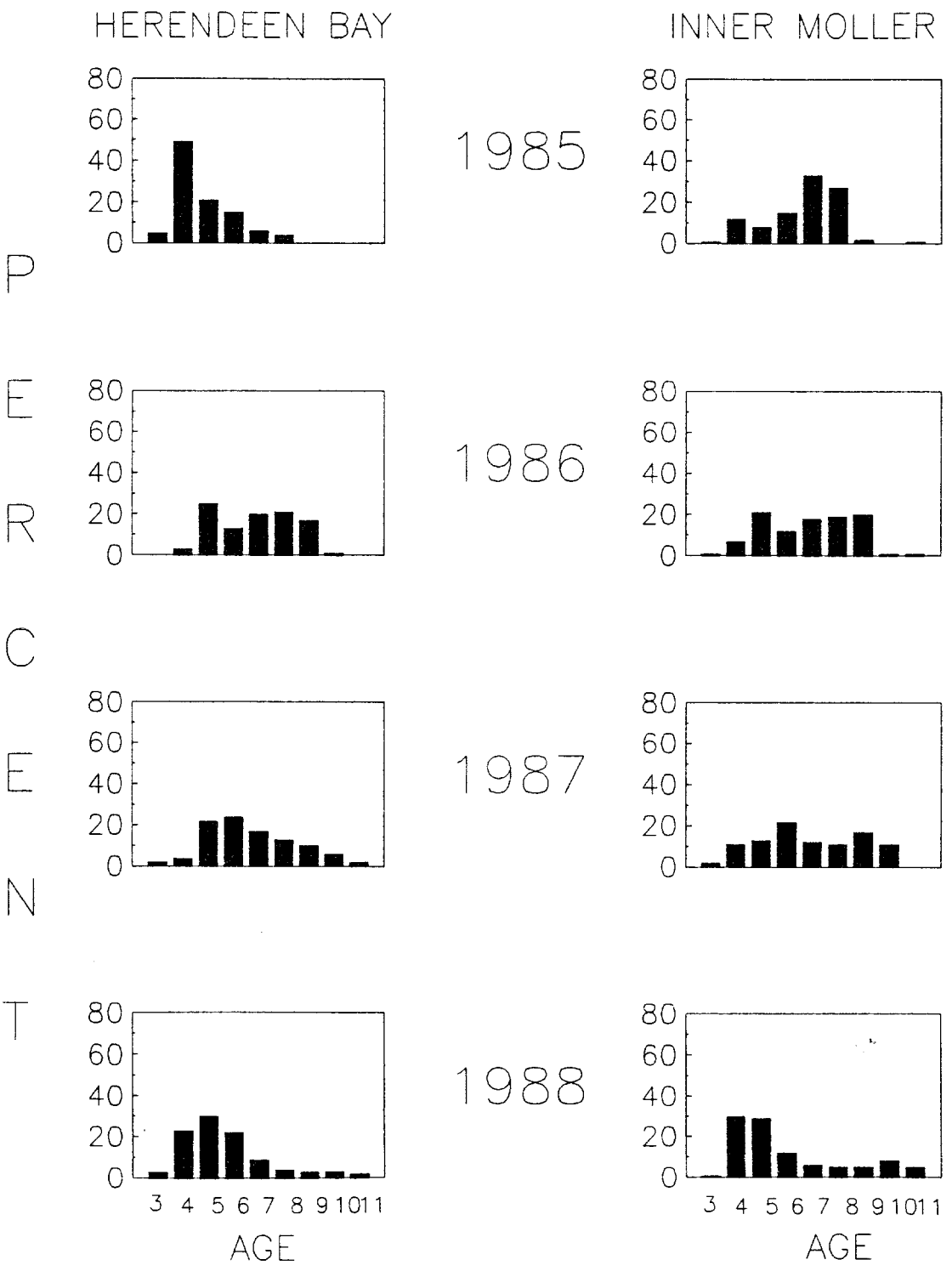
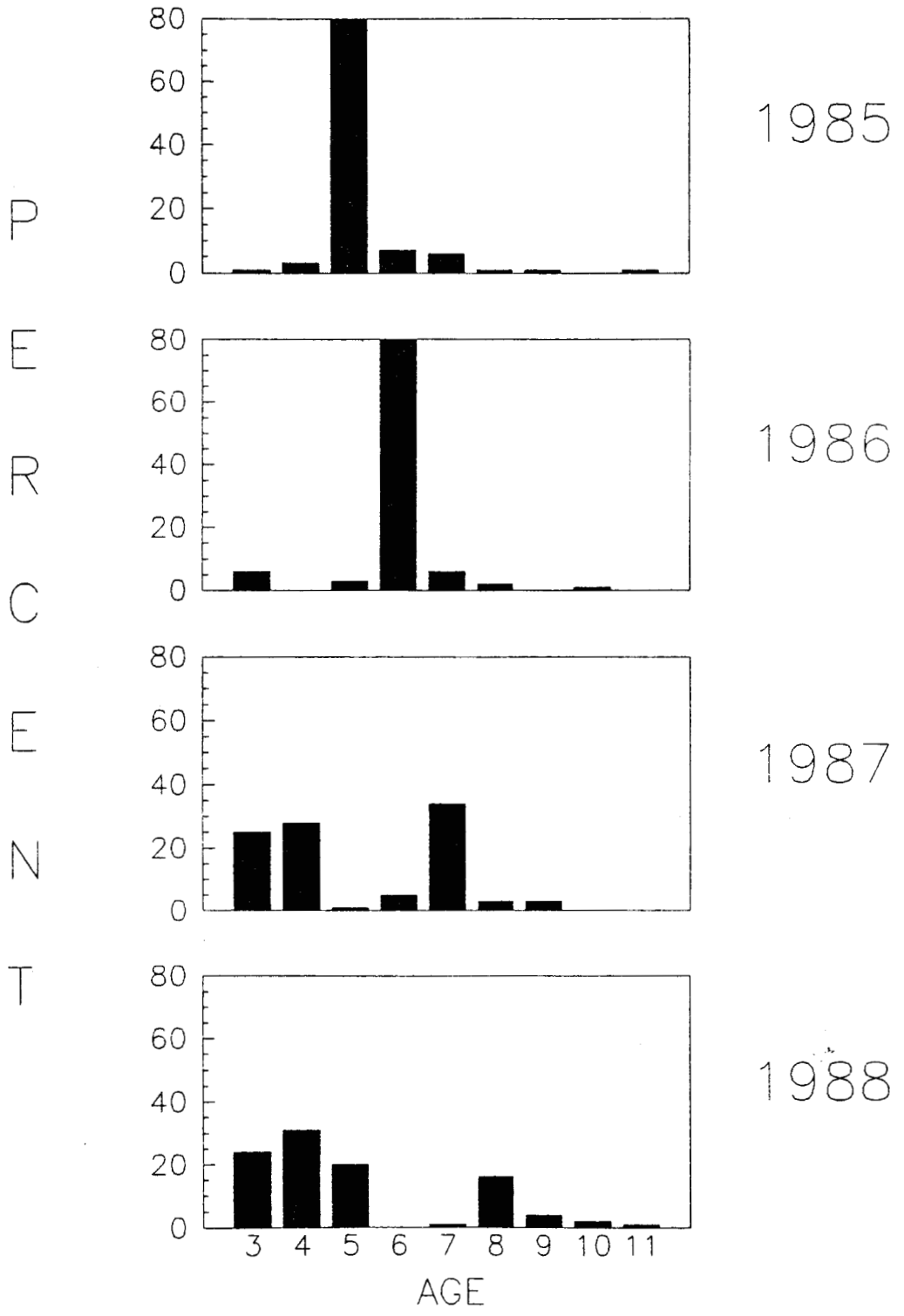


Figure 4. Canoe Bay Commercial Sac-Roe Herring Age Frequency Comparisons by Year.



EASTERN ALEUTIANS ISLANDS "DUTCH HARBOR" FOOD AND BAIT HERRING FISHERY

REPORT TO THE BOARD OF FISHERIES

By:

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[1] The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished divisional reports. The reports frequently serve diverse ad hoc informational purposes or archive basic uninterrupted data. To accommodate timely reporting of recently collected information, reports in this series may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

SUMMARY

During the 1988 Dutch Harbor food and bait herring fishery 7 seine vessels and 1 gill net vessel harvested 2,004 short tons of herring. The 1988 quota was 3,100 tons. Approximately 69% of the harvest was marketed as bait with the remainder marketed as food. The average ex-vessel price was $252 making the fishery worth approximately $505,000.

HISTORICAL PERSPECTIVE AND BACKGROUND

The Eastern Aleutian Islands herring food/bait fishery occurs near Unalaska and Akutan Islands primarily in the vicinity of Unalaska and Akutan Bays (Figure 1). By regulation the fishery management plan applies to the Unimak, Akutan, and Unalaska Districts and the Umnak District east of Samalga Pass. This fishery, also known as the "Dutch Harbor herring fishery", has occurred annually since 1981. Historically the fishery occurred from 1929 to 1938 (Table 1).

Historically the industry was a mixture of gillnet and seine gear, holding pounds, and numerous small shore-based hand packing operations. A large portion of the catch was brined for either food or bait purposes; some product was frozen. Seine gear provided the bulk of the herring harvest.

Currently fishing effort consists of purse seine vessels, which use large seines up to 250 fathoms long and 25 to 35 fathoms deep. The entire 1981-1986 harvest was taken by purse seine. One gill net vessel participated in the 1987 and 1988 season. Purse seine vessels average about 50 feet in keel length and also participate in the area M salmon fishery. The fish-finding electronics (sonar) onboard these vessels are critical to the fishing operation, much as the airplane is critical to the sac-roe fishery. Generally there is a fairly free exchange of information between all the vessels involved. Fleet efficiency is also enhanced by its ability to spread out and conduct "sonar

searches" over a fairly large area when herring concentrations leave traditional fishing areas.

When herring concentrations leave the usual harvest locations, the industry follows the herring with floating processors and tenders. Processing efficiency and product quality may decline when this occurs. Harvest locations have extended over approximately 90 miles, from Tigalda Island to Makushin Bay (Figure 1). The majority of the harvest, however has occurred within a 5 mile radius of shore-based processing facilities in Unalaska and Akutan Bays.

Two similarities between the current and historical fisheries are the quality problems associated with feeding herring and the availability of herring when industry desires to harvest them. The feed problem was overcome in the historical fishery by the use of holding pounds, where seine caught herring were held until their stomachs became empty. Gill net caught herring required special handling to prevent spoilage. In the current fishery the use of shaved ice and super-chilled seawater in conjunction with rapid processing alleviates most of the feed related problems. When feeding conditions are severe the processors have suspended buying. Historically, the availability of herring was categorized into an early summer run (late June to late July) and a late summer run (late August to early September). This pattern does not seem to hold in the current fishery as herring have been steadily harvested from July 16 through September 15.

Shore-based processors purchase the majority of the herring harvested in this fishery. Floating processors have been used each year, however they are limited by daily handling capacities which are considerably less than that of the shore-based plants. All of the processors associated with the herring fishery have floating processors and are diversified into bottomfish, salmon, halibut, black cod, scallops, and the Bering Sea and Peninsula

crab fisheries. In 1988 some herring were tendered to the King Cove shore plant.

The values shown in Table 1 represent estimates of total ex-vessel value. Generally, the ex-vessel value for bait herring has exceeded that for food herring. Industry information indicates that foreign food markets currently have multiple sources of herring from European and Canadian stocks which have been cycling high in recent years. While Eastern Aleutian food herring are a suitable and desirable product, an ample and more reliable supply of food herring from other countries currently dominate the market. The bait product from this fishery has a more solid market in that it is used locally and in other fishing ports of Alaska as bait for the longline and crab fisheries. Bait demands have been increasing in recent years and a premium is placed on quality bait, i.e. freshness and high oil content. Overall, the ex-vessel value of bait herring has remained more stable than that for food.

HARVEST STRATEGY

The harvest strategy of the Dutch Harbor food and bait herring fishery has been evolving since it was re-established in 1981 (Table 2). During the 1981 and 1982 seasons there were no harvest restrictions. From 1983-1985 the Board of Fisheries implemented a harvest ceiling of 3,527 tons per year due to biological concern over multiple exploitation on Eastern Bering Sea spawning stocks, specifically the Bristol Bay, Nelson Island and Port Moller stocks. Scale pattern analysis studies identified these stocks as comprising the Eastern Aleutian herring biomass. The extensive sac-roe fisheries occurring on these stocks coupled with the food/bait fishery on different proportions of these same spawning stocks creates an element of biological concern and possible exploitation above the board's 20% guideline policy. In 1986 a modification of the harvest ceiling was implemented by ADF&G in response to the Board of Fisheries concern for the diminishing nature of the contributing

stocks (primarily Togiak, to which the bulk of the Eastern Aleutian catch is estimated to be comprised). Concern was triggered by a lack of recruitment in the spawning stocks. The 1986 harvest ceiling in the Eastern Aleutians was reduced by 30% (to 2,453 tons). This reduction was commensurate with the percentage reduction of the observed available Togiak spawning biomass between the springs of 1985 and 1986. The 1987 harvest ceiling was set at 2,332 tons in line with the 1985 to 1987 reduction in observed Togiak spawning biomass.

In 1988 the Alaska Board of Fisheries implemented a Bering Sea Herring Fisheries Management Plan which established a criteria for calculating the Dutch Harbor food and bait quota.

To ensure the conservation of herring stocks, the board adopted a requirement that the overall exploitation of a herring stock should not exceed 20% of the spawning biomass. In the case of the Togiak spawning stock an allocation between the sac-roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery was established so that the catch did not exceed 20% of the spawning biomass. The number of fishermen involved and the value of the fishery were factors considered by the Board when making the allocations between the fisheries. The Bering Sea Management Plan defines under what conditions and to what extent there will be a Dutch Harbor food and bait fishery. The elements governing the food and bait fishery are listed below:

1. The Dutch Harbor food and bait fishery quota is determined through the following calculations:

    A. The desired exploitation rate (maximum of 20%) is applied to the estimated Togiak spawning biomass. This figure represents the total combined allowable harvest to be extracted by the Togiak sac-roe fishery, spawn on kelp fishery, and the Dutch Harbor food and bait fishery.

B. The spawn on kelp fishery is allocated 1,500 tons of herring.

C. The Dutch Harbor fishery is allocated 7% of the remaining allowable harvest (after the 1,500 ton spawn on kelp allocation has been subtracted from the total allowable harvest).

D. The Togiak herring sac-roe harvest allocation is the remainder of the total allowable harvest after the spawn on kelp and Dutch Harbor allocation have been subtracted.

2. If the herring sac-roe harvest in the Togiak District exceeds its allocation by more than 20%, the department shall deduct the amount of herring that exceeds the Togiak District herring sac-roe allocation from the Dutch Harbor fishery allocation for that season.

3. If the Togiak District herring sac-roe fisheries do not harvest their allocation the unharvested amount of herring will be added to the Dutch Harbor fishery allocation. When an increase of the Dutch Harbor fishery allocation is made under this section, the total allocated harvest may not exceed 3,100 s.t.

4. When the Togiak District is below its threshold (35,000 tons), the Dutch Harbor fishery will be closed for that season.

1988 FISHERY

Using the newly adopted Bering Sea Herring Management Plan and the projected Togiak spawning biomass, a preseason estimated quota of 658 tons was anticipated for the Dutch Harbor herring fishery. A much larger than anticipated biomass was observed in Togiak during the 1988 spring sac-roe fishery. In addition the

allowable sac-roe harvest was not taken in Togiak. Because of these two factors the Dutch Harbor quota was set at 3,100 tons, the maximum harvest allowed under the Bering Sea Herring Management Plan.

The Dutch Harbor fishery opens by regulation on July 16. Since the preseason quota was anticipated to be only 658 tons, short fishing periods were to be established to prevent overharvest. In past years daily catches of 800 tons were not uncommon. Since the actual quota was 3,100 tons, the fishery was initially open to continuous fishing at 12:01 A.M. July 16. Seven seine vessels and one gill net vessel began fishing on July 16. Six companies with a holding capacity of approximately 1,400 tons were registered to buy herring.

Herring were accessible for harvest and 1,000 tons were taken on July 17 and 18 (Table 3). By the third day of the fishery markets began to disintegrate and the harvest rate slowed down. When it was anticipated preseason that the quota would be 658 tons, the major purchaser of bait herring imported herring from the east coast. As a result, there was less of a demand for bait herring. There was a limited market for food herring, however quality standards were greatly increased from past years. Fish stomachs as well as intestines had to be virtually empty of feed before they would be bought for food herring. Buying was suspended by several companies on July 19 and 20 due to the presence of feed in fish stomachs. One load of approximately 50 tons was dumped when it failed to meet food herring quality standards.

By July 20 fishermen began leaving the herring fishery due to the inability to consistently find herring free of feed, the large pink salmon run on the South Peninsula, and the high price being paid for pink salmon. By July 22 one seine vessel remained to fish for herring in between the Dutch Harbor salmon fishing openings.

The fishery was left open until it closed by regulation on February 28. Only 2,003 tons of the 3,200 ton quota were taken. A total of 1,383 tons were used as bait herring with 621 tons used as food. The harvest initially began in western Unalaska Bay, then moved west of Cape Cheerful near Winslow Bay on July 19. The average price per ton was $252, making the fishery worth approximately $505,000 to the fishermen.

AGE CLASS COMPOSITION

From July 16 to July 30, 684 herring were sampled for age, weight, and length data. Age composition data are listed in Tables 5 and 6. The majority (80%) of the samples taken in Dutch Harbor were 9 years old or older. Virtually no fish under 7 years old were present in the Dutch Harbor fishery. The Togiak escapement from the 1988 spring sac-roe fishery was estimated to be comprised of 60% age 9 and older fish. The age class composition of the 1988 spring Togiak escapement is very comparable to the 1988 Dutch Harbor fishery. The only noticeable difference is the absence of ages 4 and 5 from the Dutch Harbor samples. Age 4 and 5 made up 17% of the Togiak age composition.

Figure 1. Waters included in the Dutch Harbor herring food and bait fisheries management plan.

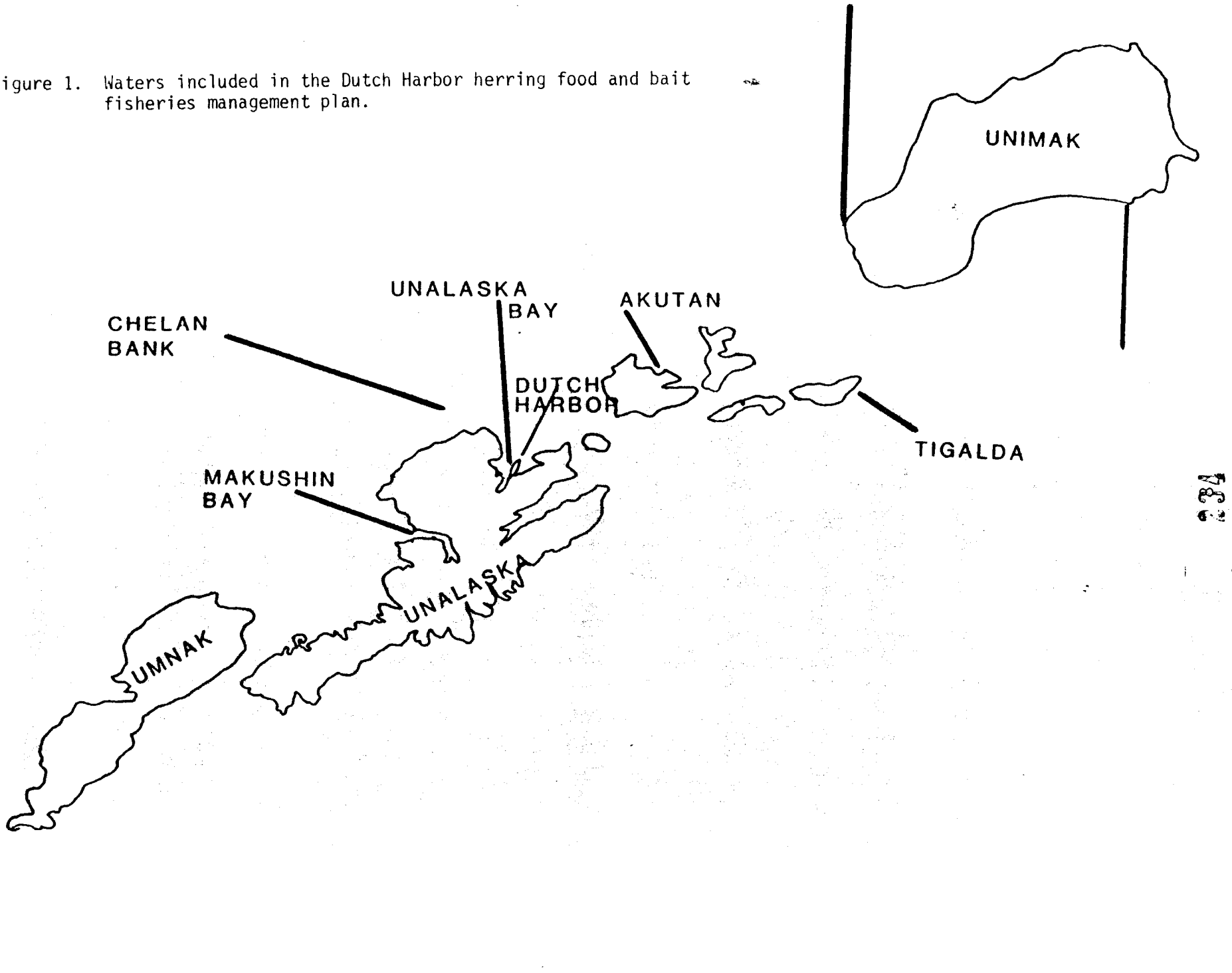


Table 1. PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIAN ISLANDS HERRING FOOD/BAIT FISHERY HISTORICAL INDUSTRY SUMMARY BY YEAR

YEAR	HARVEST IN SHORT TONS	NO. PROCESSORS	NO. BOATS	NO. LANDINGS	X TONS PER BOAT	X TONS PER LANDING	X $ PER TON	$ VALUE (MILLIONS)	X $ PER VESSEL
1929	1259	*	*	*	*	*	*	*	*
1930	1916	*	*	*	*	*	*	*	*
1931	1056	12	26	*	*	*	*	*	*
1932	2510	12	30	*	*	*	*	*	*
1933	1585	12	38	*	*	*	*	*	*
1934	1533	9	*	*	*	*	*	*	*
1935	2412	10	*	*	*	*	*	*	*
1936	1379	8	*	*	*	*	*	*	*
1937	579	*	*	*	*	*	*	*	*
1938	513	*	*	*	*	*	*	*	*
1939-44	NO FISHERY								
1945	75	*	*	*	*	*	*	*	*
1946-80	NO FISHERY								
1981	704	2	2	16	352	44	300	0.211	0.11
1982	3565	6	7	95	509.3	37.5	300	1.02	0.15
1983	3567	5	8	96	445.9	37.2	232	0.828	0.10
1984	3578	5	9	61	397.6	58.7	210	0.751	0.68
1985	3480	3	6	78	560	44.6	162	0.564	0.09
1986	2394	4	7	53	342	45.2	254	0.600	0.09
1987	2503	4	8	45	373	55.6	300	0.751	0.09
1988	2004	6	8[a]	59	251	34.0	252	.505	0.06

[a]Seven seiners and one gill netter participated.

Table 2. DUTCH HARBOR FOOD AND BAIT HERRING FISHERY (SHORT TONS)

YEAR	PRESEASON TOGIAK SPAWNING BIOMASS	HARVEST QUOTA	FOOD AND BAIT HARVEST	% SPAWNING BIOMASS HARVESTED
1981	159,000	NONE	704	.4%
1982	98,000	NONE	3,565	2.5%
1983	142,000	3,525[a]	3,567	2.5%
1984	115,000	3,525	3,578	3.1%
1985	132,000	3,525	3,480	2.7%
1986	96,000	2,453[b]	2,394	2.5%
1987	88,000	2,332[b]	2,503	2.8%
1988	132,000	3,100[c]	2,204	2.3%

[a]Harvest ceiling of 3,525 established by Board of Fisheries.

[b]Harvest quota set by ADF&G. Reduced proportionate with the drop from the 1985 Togiak spawning biomass level.

[c]Harvest quota set under provisions of the Bering Sea Herring Fisheries Management Plan.

Table 3. 1988 DAILY HERRING CATCHES FOR THE DUTCH HARBOR FOOD AND BAIT HERRING FISHERY

DATE		DAILY	CUMULATIVE
July	16	188.75	188,75
	17	461.17	649.92
	18	501.60	1,151.52
	19	186.63	1,338.15
	20	134.33	1,472.48
	21	62.90	1,535.38
	22	139.00	1,674.38
	23	47.54	1,721.92
	24	42.35	1,764.27
	25	24.25	1,788.52
	26	39.14	1,827.66
	27	44.12	1,871.78
	30	22.20	1,893.98
Aug.	9	3.60	1,897.58
	11	2.46	1,900.04
	15	.75	1,900.79
	16	.75	1,901.54
	24	44.79	1,946.33
Sept.	13	34.45	1,980.78
	17	8.10	1,988.88
	18	14.95	2,003.83

Table 4. PENINSULA/ALEUTIANS MANAGEMENT AREA EASTERN ALEUTIANS HERRING FOOD/BAIT FISHERY HARVEST DURATION BY YEAR

YEAR	LANDING DATE FIRST	LANDING DATE LAST	DAYS FISHED	SEINE VESSELS	TOTAL HARVEST
1981	8/03	8/23	21	2	704
1982	8/05	9/12	39	6	3,565
1983	7/23	9/06	46	5	3,567
1984	7/17	7/27	11	5	3,578
1985	7/17	8/11	26	3	3,480
1986	7/16	7/28	13	4	2,394
1987	7/16	7/23	4[a]	9[b]	2,503
1988	7/16	9/18	21	8[b]	2,004

[a]Closed 7/19, reopened for 14 hours on 7/23.

[b]Includes one gill netter.

Table 5. 1988 DUTCH HARBOR FOOD AND BAIT HERRING AGE CLASS COMPOSITION OF COMMERCIAL HARVEST (Taken From Seine Harvest)

Date	Sample Size[a]		AGES 4	5	6	7	8	9	10	11+
July 16	105	Number	0	1	2	14	4	25	32	27
17	176	Number	0	0	1	24	9	32	59	51
18	79	Number	0	0	0	4	2	14	22	37
19	44	Number	0	5	2	8	2	8	6	13
20	86	Number	0	1	2	8	6	17	21	31
21	55	Number	0	2	1	5	4	6	15	22
22	52	Number	0	0	2	2	1	6	14	27
27	47	Number	0	0	0	12	5	8	8	14
30	40	Number	0	0	0	5	3	12	7	13
TOTAL	684	Number	0	9	10	82	36	128	184	235
		Percent	0	1	2	12	5	19	27	34

[a]Samples collected from seine catch.

Table 6. DUTCH HARBOR HERRING FOOD/BAIT FISHERY PERCENT AGE COMPOSITIONS (%) BY YEAR

	AGE CLASS								
YEAR	3	4	5	6	7	8	9	10	11+
1981	15	45	20	6	0	12	2	0	0
1982	5	10	62	10	6	8	4	0	0
1983	0	1	19	69	5	1	4	1	0
1984	0	0	2	14	65	7	3	8	1
1985	0	0	1	8	32	50	5	3	1
1986	0	0	1	1	13	37	42	3	3
1987	0	0	0	0	2	12	41	34	11
1988	0	0	1	2	12	5	19	27	34

ALASKA PENINSULA AREA

CHAPTER 09.—ALASKA PENINSULA AREA

ARTICLE 1. DESCRIPTION OF AREA.

5 AAC 09.001. APPLICATION OF THIS CHAPTER. Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in chs. 1 and 2 of this title.

5 AAC 09.100. DESCRIPTION OF AREA. The Alaska Peninsula Area includes all waters of Alaska from Cape Menshikof to Cape Sarichef Light and from a line extending from Scotch Cap through the easternmost tip of Ugamak Island to a line extending 135° southeast from Kupreanof Point.

ARTICLE 2. FISHING DISTRICTS AND SECTIONS.

5 AAC 09.200. FISHING DISTRICTS AND SECTIONS. (a) The Northern District includes all waters on the north (Bering Sea) side of the Alaska Peninsula between the westernmost tip of Cape Menshikof and the southernmost tip of Moffet Point:

(1) Cinder River Section: All waters of the Northern District east of 158°20′ W. long.;

(2) Port Heiden Sections:

(A) Outer Port Heiden Section: all waters of the Northern District located between 158°20′ W. long. and the longitude of Strogonof Point (158°51′ W. long), exclusive of the Inner Port Heiden Section;

(B) Inner Port Heiden Section: all waters of Port Heiden Bay south and east of a line from Strogonof Point at 56°53′16″ N. lat., 158°50′36″ W. long. to the mainland shore of the northeast entrance to the bay at 56°56′31″ N. lat., 158°40′44″ W. long.;

(3) Ilnik Section: all waters between the longitude of Strogonof Point (158°51′ W.long.) and the longitude of Three Hills (159°50′ W.long.);

(4) Three Hills Section: all waters between the longitude of Three Hills (159°50′ W.long.) and the longitude of Cape Seniavin Light (160°06′ W.long.);

(5) Bear River Section: all waters between the longitude of Cape Seniavin Light (160°06′ W.long. and the longitude of Wolf Point (160°48′30″ W.long.), excluding the waters of the Herendeen-Moller Bay Section;

(6) Herendeen-Moller Bay Section: all waters south of a line extending from Entrance Point to Wolf Point to Point Edward on Cape Rozhnof;

(7) Nelson Lagoon Section: all waters of Nelson Lagoon inside the bars and inside a line extending from Lagoon Point to Wolf Point to Point Edward on Cape Rozhnof;

(8) Caribou Flats Section: all waters between Wolf Point and a point at 55°53′40″ N.lat., 161°49′ W.long., approximately 22 nautical miles west of Nelson Lagoon Village and exclusive of the waters comprising the Nelson Lagoon section;

(9) Black Hills Section: all waters between 55°53′40″ N.lat., 161°49′ W.long., and Moffet Point.

(b) The Northwestern District: all waters on the north (Bering Sea) side of the Alaska Peninsula between Moffet Point and Cape Sarichef Light on Unimak Island, including Bechevin Bay and the waters of Isanotski Strait north of a line from the False Pass cannery dock to Nichols Point.

(1) Izembek-Moffet Bay Section: all waters between Moffet Point and Cape Galazenap;

(2) Bechevin Bay Section: all waters between Cape Galazenap and Chunak Point, including Bechevin Bay and the waters of Isanotski Strait north of a line from the False Pass cannery dock to Nichols Point;

(3) Swanson Lagoon Section: all waters on the north side of Unimak Island between the easternmost edge of Chunak Point (55°02′ N. lat., 163°27′ W. long.) and east of the longitude of Otter Point (163°16′30″ W. long.), excluding the waters of the Bechevin Bay Section;

(4) Urilia Bay Section: all waters on the north side of Unimak Island west of the longitude of Otter Point (163°16′30″ W. long.) and east of the northernmost tip of Cape Mordvinof (54°56′ N. lat., 164°25′45″ W. long.), including Peterson and Christianson Lagoons;

(5) Dublin Bay Section: all waters on the northwest side of Unimak Island east of the northernmost tip of Cape Mordvinof and west of Cape Sarichef Light (54° 35′50″ N. lat., 164° 55′ 30″ W. long.).

(c) The Unimak District includes all waters on the south side of Unimak Island between a line extending from Scotch Cap (54°24′ N. lat., 164°47′36″ W. long.) through the easternmost tip of Ugamak Island (54°12′42″ N. lat., 164°45′48″ W. long.), and a line extending 115° from Cape Pankof Light (54°39′36″ N. lat., 163°03′36″ W. long), including the Sanak Islands;

(1) Cape Lutke Section: all waters of the Unimak District east of a line extending from Scotch Cap (54°24′ N. lat., 164°47′36″ W. long) through the easternmost tip of Ugamak Island (54°12′42″ N. lat., 164°45′48″ W. long.), and west of the longitude of Rock Island (163°37′18″ W. long.);

(2) Otter Cove Section: all waters of the Unimak District east of the longitude of Rock Island (163°37′18″ W. long.) and north of 54°30′ N. lat.;

(3) Sanak Island Section: all waters of the Unimak District east of the longitude of Rock Island (163°37′18″ W. long.) and south of 54°30′ N. lat..

(d) Southwestern District: all waters on the south side of the Alaska Peninsula north and east of a line extending 115° from Pankof Light (54°39'36" N. lat., 163°03'36" W. long.) and west of a line extending 106° from Arch Point Light (55°12'20" N. lat., 161°54'15" W. long.) to the western boundary of the Southeastern District (longitude of McGinty Point: 160°59' W. long.), including Inner Iliasik, Outer Iliasik, Goloi, Dolgoi, Poperechoi, and Deer Islands, all waters of Ikatan Bay, and all waters of Isanotski Strait south of a line from the False Pass cannery dock (54°51'30" N. lat., 163°24'30" W. long.) to Nichols Point (54°51'30" N. lat., 163°23'10" W. long.);

(1) Ikatan Bay Section: all waters of the Southwestern District located south and west of a line from Kenmore Head (54°57' N. lat., 163°01'40" W. long.) to Hague Rock (54°33'10" N. lat., 162°24' W. long.), and west of a line extending true south from Hague Rock;

(2) Morzhovoi Bay Section: all waters of Morzhovoi Bay north of a line from Kenmore Head to Cape Tachilni (54°56' N. lat., 162°52'30" W. long.);

(3) Thin Point Section: all waters of the Southwestern District east of Kenmore Head (54°57' N. lat., 163°01'40" W. long.) and west of Thin Point (54°57'30" N. lat., 162°33'30" W. long.), excluding waters of the Ikatan, Morzhovoi, and Cold Bay Sections;

(4) Cold Bay Section: all waters north of a line from Thin Point to Vodapoini Point;

(5) Deer Island Section: all waters within one nautical mile of Deer Island;

(6) Belkofski Bay Section: all waters between Vodapoini Point and Moss Cape, including Inner and Outer Iliasik Islands but excluding the waters of the Deer Island section;

(7) Volcano Bay Section: all waters between Moss Cape and Arch Point including Goloi, Dolgoi and Poperechnoi Islands;

(8) General Section: all other waters of the Southwestern district.

(e) South Central District: all waters on the south side of the Alaska Peninsula north and east of a line extending 106° from Arch Point Light (55°12'20" N. lat., 161°54'15" W. long.), and west of a line extending south from McGinty Point (55°27'30" N. lat., 160°59' W. long.), including Ukolnoi and Wosnesenski Islands;

(1) Pavlof Bay Section: all waters of Pavlof Bay, excluding the Canoe Bay section, and all other waters of the district west of the longitude of Cape Tolstoi (161°30' W.long.);

(2) Canoe Bay Section: all waters of Canoe Bay enclosed by a line from a point at 55°35'37" N.lat., 161°21'33" W.long. to a point at 55°35'41" N.lat., 161°21'40" W.long.;

(3) Mino Creek-Little Coal Bay Section: all waters of the district, excluding those of the Pavlof Bay and Canoe Bay sections, between the longitude of McGinty Point (160°59' W.long.) and the longitude of Cape Tolstoi (161°30' W.long.);

(f) Southeastern District: all waters on the south side of the Alaska Peninsula east of a line extending south from McGinty Point (55°27'30" N. lat., 160°59' W. long.), and west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.), including all of the Shumagin Islands;

(1) Beaver Bay Section: all waters of the Southeastern District east of the longitude of McGinty Point (160°59' W. long.), west of 160°49' W. long., and north of 55°26' N. lat.;

(2) Balboa Bay Section: all waters of the Southeastern District east of 160°49' W. long., north of 55°26' N. lat., and west of the longitude of Swedania Point (160°31'30" W. long.);

(3) Shumagin Islands Section: all waters of the Southeastern District east of the longitude of McGinty Point (160°59'W. long.), west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.), south of a line from 55°26' N. lat., 160°31'30" W. long., to 55°32'12" N. lat., 160°02'36" W. long. (approximately 1 nautical mile north of Karpa Island), and east to the Alaska Peninsula Area boundary (a line extending 135° from Kupreanof Point), excluding the Beaver Bay, Balboa Bay, and Southwest Stepovak Sections:

(4) Southwest Stepovak Section: all waters of the Southeastern District south of the latitude of 55°37'20" N. lat., west of 159°52' W. long., north of Shumagin Islands Section, and east of the Balboa Bay Section;

(5) Northwest Stepovak Section: all waters of the Southeastern District north of 55°37'20" N. lat. and west of the longitude of Dent Point (159°52' W. long.);

(6) Stepovak Flats Section: all waters of the Southeastern District north of 55°48'18" N. lat. and east of the longitude of Dent Point (159°52' W. long.);

(7) East Stepovak Section: all waters of the Southeastern District south of 55°48'18" N. lat., east of the longitude of Dent Point (159°52' W. long.), north of 55°32'12" N. lat., and west of a line extending 135° from Kupreanof Point (55°34' N. lat., 159°36' W. long.).

ARTICLE 3.—SALMON FISHERY

5 AAC 09.301. SEAWARD BOUNDARY OF DISTRICTS. For the purpose of managing the historical salmon net fishery in the vicinity of False Pass and Unimak Bight, the outer boundary of the Southwestern and Unimak Districts is a line three miles seaward from a line commencing at 54°26'45" N.lat., 162°53' W.long., near the western end of Sanak Island to Cape Lutke on Unimak Island. The seaward boundary of all other districts is a line three miles seaward of the baseline described in 5 AAC 39.975(13).

5 AAC 09.310. FISHING SEASONS. (a) In the Northern District, salmon may be taken as follows:

(1) Cinder River Section

(A) from May 1 through September 30 within the lagoon into which Cinder River drains (locally known as False Ugashik or Shagong);

(B) from August 1 through September 30 throughout this section;

(2) Port Heiden Sections:

(A) Inner Point Heiden Section: from May 1 through September 30;

(B) Outer Port Heiden Section: from August 1 through September 30;

(3) Ilnik Section

(A) from May 1 through September 30 within Ilnik Lagoon and all waters inside the Seal Islands;

(B) from July 5 through September 30 throughout this section;

(4) Three Hills Section: from June 25 through September 30;

(5) Bear River Section: from May 1 through September 30;

(6) Herendeen-Moller Bay Section: from May 1 through July 20 with the exception that within the bight enclosed by a line from Entrance Point to Harbor Point salmon may be taken from May 1 through September 30;

(7) Nelson Lagoon Section: from May 1 through September 30;

(8) Caribou Flats Section: from May 1 through June 20;

(9) Black Hills Section: from May 1 through September 30.

(b) In the Northwestern District, salmon may be taken only from June 1 through August 10, except that

(1) in the Dublin Bay Section, salmon may be taken only from July 10 through August 10;

(2) in the Bechevin Bay Section, salmon may be taken only from June 1 through September 30;

(3) after September 1, the salmon fishery season will be opened by emergency order.

(c) In the Unimak District, salmon may be taken only from June 1 through September 30.

(d) In the Southwestern District, salmon may be taken only from June 1 through September 30.

(e) In the South Central District, salmon may be taken only from June 1 through September 30.

(f) In the Southeastern District, salmon may be taken only from June 1 through September 30.

5 AAC 09.320. FISHING PERIODS. (a) In the Northern District, salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Thursday, except as follows:

(1) in the Black Hills and Caribou Flats Sections, salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Friday;

(2) in the Nelson Lagoon Section, salmon may be taken

(A) during the period of May 1 through June 15, from 6:00 a.m. Monday until 12:00 midnight Wednesday;

(B) during the period June 16 through August 15, from 6:00 a.m. Monday until 12:00 midnight Thursday;

(C) after August 15, from 6:00 a.m. Monday until 12:00 midnight Wednesday;

(3) in the Cinder River, Outer Port Heiden, Inner Port Heiden, and Ilnik Sections salmon may be taken from 6:00 a.m. Monday until 6:00 p.m. Wednesday.

(b) Salmon may be taken only during the open season in the Northwestern District in the

(1) Izembek-Moffet Bay Section: from 6:00 a.m. Monday until 6:00 p.m. Thursday;

(2) Bechevin Bay Section: only during fishing periods established by emergency order;

(3) Urilia Bay Section: from 6:00 a.m. Monday until 6:00 p.m. Thursday.

(4) Dublin Bay Section, from 6:00 a.m. Monday until 6:00 p.m. Thursday.

(c) Salmon may be taken during the open season in the Unimak District during fishing periods established by emergency order.

(d) Salmon may be taken only during the open season in the Southwestern District only during fishing periods established by emergency order.

(e) Salmon may be taken only during the open season in the South Central District only during fishing periods established by emergency order.

(f) Salmon may be taken only during the open season in the Southeastern District only during fishing periods established by emergency order.

5 AAC 09.330. GEAR. (a) In the Northern District salmon may be taken:

(1) in the Cinder River Section: with drift gill nets or set gill nets only;

(2) in the Inner and Outer Port Heiden Sections: with drift gill nets or set gill nets only;

(3) in the Ilnik Section: with drift gill nets or set gill nets only;

(4) in the Three Hills Section: with drift gill nets only;

(5) in the Bear River Section: with drift gill nets, purse seines and hand purse seines;

(6) in the Herendeen-Moller Bay Section: with drift gill nets, set gill nets, purse seines and hand purse seines;

(7) in the Nelson Lagoon Section: with drift gill nets or set gill nets;

(8) in the Caribou Flats Section: with drift gill nets or set gill nets;

(9) in the Black Hills Section; with drift gill nets or set gill nets only;

(b) In the Northwestern District, salmon may be taken with drift gill nets, set gill nets, purse seines and hand purse seines.

(c) In the Unimak District, salmon may be taken with drift gill nets, set gill nets, purse seines and hand purse seines.

(d) In the Southwestern District, salmon may be taken with purse seines, hand purse seines and set gill nets except that

(1) salmon may also be taken with drift gill nets west of a line from Kenmore Head to Hague Rocks to the easternmost tip of the Sanak Islands;

(e) In the South Central District, salmon may be taken with set gill nets, purse seines and hand purse seines, except that

(2) within Canoe Bay, salmon may be taken only with purse seines and hand purse seines;

(f) In the Southeastern District, salmon may be taken only with set gill nets, purse seines and hand purse seines except that

(1) salmon may be taken only with purse seines and hand purse seines in the area between Popof Head and Dark Cliffs (Popof Island) from June 1 through August 31;

(3) salmon may be taken only with set gill nets from June 1 through July 10 in the Beaver Bay, Balboa Bay, Southwest Stepovak, Northwest Stepovak, Stepovak Flats, and East Stepovak Sections;

(4) salmon may be taken by set gill net during periods when the seine fishery is closed by emergency order due to presence of immature salmon.

5 AAC 09.331. GILL NET SPECIFICATIONS AND OPERATION. (a) The size and operation of drift gill nets is as follows:

(1) the aggregate length of drift gill nets on a salmon fishing boat or in use by such boat shall be no more than 200 fathoms in length;

(2) the mesh size of drift gill nets shall not be less than five and one-quarter inches, except that in the Caribou Flats Section the mesh size of drift gill nets shall not be less than eight and one-half inches;

(3) no drift gill net used in the Nelson Lagoon Section may exceed 29 meshes in depth, except that after August 15 no drift gill net may exceed 38 meshes in depth.

(b) The size and operation of set gill nets is as follows:

(1) a set gill net may be no more than 100 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 200 fathoms; no more than two gill net sites may be operated by a CFEC permit holder except that in the

(A) Inner Port Heiden Section a set gill net may be no more than 50 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 100 fathoms; and no more than two gill net sites may be operated by a CFEC permit holder;

(B) Ilnik Lagoon (portion of the Ilnik Section) a set gill net may be no more than 50 fathoms in length; the aggregate length of set gill nets operated by a CFEC permit holder may be no more than 150 fathoms; and no more than three gill net sites may be operated by a CFEC permit holder;

(2) set gill nets shall be operated in substantially a straight line; no more than 30 fathoms of each set gill net may be used as a single hook;

(3) the mesh size of set gill nets shall not be less than five and one-quarter inches, except that in the Caribou Flats Section the mesh size of set gill nets shall not be less than eight and one-half inches;

(4) the maximum depth of set gill nets used in the Nelson Lagoon Section shall not be over 29 meshes;

(5) in the Unimak, Southwestern, South Central, and Southeastern Districts, 10 fathoms of seine webbing may be used on the shoreward end of a set gill net; the shoreward end of the seine webbing must be attached to the beach above low tide.

(6) During hours of darkness, each set gill net must be marked with at least one red light on the seaward end of the net, and at least one red light on both ends of the net if that net is more than 300 feet from shore.

5 AAC 09.332. SEINE SPECIFICATIONS AND OPERATION. (a) Purse seines and hand purse seines may not be less than 100 fathoms nor more than 250 fathoms in length.

(b) Leads may not be less than 50 fathoms nor more than 150 fathoms in length, except that leads of any length may be used in the Unimak District and the Bear River Section. Only one lead may be used with a seine. A lead may be attached to only one end of a seine, and the lead may not be attached to the boat end of the seine. Leads of any length may be carried onboard vessels in the Ikatan Bay Section.

5 AAC 09.334. IDENTIFICATION OF GEAR. (a) Each drift gill net in operation must have at each end a bright red keg, buoy or cluster of floats plainly and legibly marked with the permanent vessel license plate (ADF&G) number of the vessel operating the gear as well as the initials of the operator.

(b) Each set gill net in operation must be identified as required by 5 AAC 39.280.

5 AAC 09.335. MINIMUM DISTANCE BETWEEN UNITS OF GEAR. No part of a set gill net may be set or operated within 900 feet of any part of another set gill net, except that in the

(1) Inner Port Heiden Section no part of a set gill net may be set or operated within 600 feet of any part of another set gill net;

(2) Nelson Lagoon Section no part of a set gill net may be set or operated within 1,800 feet of any part of another operating set gill net.

5 AAC 09.350. CLOSED WATERS. Salmon may not be taken in the following locations:

(1) Meshik River: all waters upstream of a line crossing the river from a point at 56°47'04" N.lat., 158°41'06" W.long., to 56°47'58" N.lat., 158°38'45" W.long.; this is approximately one-half nautical mile upstream from the mean high tide mouth and approximately at the lower line of permanent grass growth;

(2) Sandy River

(A) May 1 through July 26; within 2,000 yards of the terminus of the river;

(B) July 27 through September 30: within 500 yards of the terminus of the river;

(3) Bear River

(A) May 1 through August 8: within 1,000 yards of the terminus of the river;

(B) August 9 through September 30: within 500 yards of the terminus of the river;

(4) Frank's Lagoon: all waters of the lagoon and within 500 yards outside the entrance;

(5) Bechevin Bay

(A) Saint Catherine Cove (Mike's Creek): all waters within 1,000 yards of the stream located at 55°00'48" N.lat., 163°31'33" W.long.;

(B) Trader's Cove: all waters north and east of a line from Morzhovoi Village (54°54"45" N.lat., 162°18'15" W.long.) to the base of Trader Mountain (55°00'05" N.lat., 162°18'22" W.long.);

(C) Warmsprings Bay: all waters southeast of a line from a point on the south shore of the bay at 54°56'28 N.lat., 163°15'45" W.long., to a point on the north shore of the bay at 54°57'16" N.lat., 163°15'33" W.long.;

(6) Christianson's Lagoon: all waters of the lagoon and its exit channel from the lagoon to a point 1,500 yards downstream from the lagoon;

(7) Ikatan Bay: all waters within 1,000 yards of the stream at 54°45'15" N.lat., 163°15'15" W.long. on the north shore of the Ikatan Peninsula which exits from Swede's Lake;

(8) Morzhovoi Bay: all waters including Littlejohn Lagoon north and west of a line from the easternmost tip of Kenmore Head to Reynolds Head (55°9' N.lat., 162°57'51" W.long.) before July 7; beginning July 7:

(A) Middle Lagoon: all waters of the lagoon and within 1,000 yards of its entrance;

(B) Littlejohn Lagoon: all waters of the lagoon and within 500 yards of its entrance at the narrows;

(9) Thin Point Cove and Lagoon: all waters north and west of a line from the tip of Thin Point westward to a point on the shore at 54°57'30" N.lat., 162°43'15" W.long.;

(10) Cold Bay

(A) Old Man Lagoon, Mortensen Lagoon and Nurse Lagoon: all waters of the lagoons and within 500 yards outside their entrances;

(B) Lenard Harbor: all water east of a line from a point on the south shore at 55°06' N.lat., 162°23' W.long., to a point on the north shore at 55°07' N.lat., 162°23' W.long., and within 1,000 yards of any salmon stream;

(C) Kinzarof Lagoon area: all waters north of a line from 55°13'25" N.lat., 162°43'25" W.long., to 55°16'10" N.lat., 162°34'25" W.long.;

(11) Deer Island

(A) all waters within 200 yards of the stream located at 54°55'41" N.lat., 162°14'12" W.long. and locally known as Eastern Creek.

(B) all waters within 200 yards of the stream located at 54°51'44" N.lat., 162°22'07" W.long. and locally known as Southern Creek;

(12) Belkofski Bay: all waters north and east of a line from 55°09'22" N.lat., 162°08'12" W.long., to 55°08'08" N.lat., 162°07'03" W.long., then to 55°07'20" N.lat., 162°07'39" W.long.;

(13) Volcano and Bear Bay

(A) all waters north of a line from 55°13'24" N.lat., 162°01'24" W.long., to 55°13'51" N.lat., 161°58' W.long.;

(B) all waters of Bear Bay west of 162° W.long. and locally known as Little Bear Bay;

(14) Longjohn Lagoon: all waters of the lagoon and within 500 yards outside its entrance;

(15) Pavlof Bay

(A) Chinaman Lagoon and Jackson Lagoon: all waters of the lagoons and within 1,000 yards outside their entrances;

(B) Dry Lagoon: all waters of the lagoon and within 500 yards of its entrance;

(C) Canoe Bay: all waters east of 161°14'12" W. long.;

(16) Balboa Bay

(A) all waters north of a line extending west from Reef Point;

(B) all waters of Lefthand Bay west of a line from 55°31'36" N.lat., 160°42'54" W.long., to 55°33'12" N.lat., 160°42'06" W.long.;

(17) Zachary Bay: all waters of the inner bay south and west of a line extending from the inner edge of the grass line of the sand spit to the west of the tip of the prominent point of land approximately 1½ nautical miles inside Quartz Point;

(18) San Diego Bay: all waters of a lagoon at the head of the bay and within 500 yards outside the lagoon's entrance except that from July 19 through August 31 the closure includes all waters west of a line from the reef at 55°33'08" N.lat., 160°26'30" W.long., to the headland at 55°34'02" N.lat., 160°25'48" W.long.;

(19) Dorenoi Bay

(A) through July 25, all waters north and west of a line from the tip of Renshaw Point to the opposite shore at 55°38'30" N. lat., 160°19' W. long.;

(B) after July 25, all waters within 500 yards of the terminus of any salmon stream;

(20) Chichagof Bay: all waters of the lagoon and within 500 yards of the lagoon entrance;

(21) Orzinski Bay (Orzenoi): within 1,000 yards of any salmon stream;

(22) Grub Gulch: all waters north and east of a line from 55°48'18" N.lat., 159°56'06" W.long. to 55°49'00" N.lat., 159°58'12" W.long.;

(23) Stepovak Bay: from June 1 through July 28, all waters within 500 yards of any salmon stream or lagoon unless otherwise specified; from July 29 through September 30, all waters north of a line extending east from the tip of Dent Point to a point on the Kupreanof Peninsula at 55°47' N.lat., 159°38'30" W.long.;

(24) Bay Point: all waters of the lagoon and within 500 yards of the lagoon entrance;

(25) Amak Island and adjacent Sea Lion Rocks: all waters within three nautical miles of these islands and elevations;

(27) Applegate Cove-Norma Bay: all waters south of a line from 55°14'08" N.lat., 162°53' W.long., to the southwest extremity of Norma Bay at 55°10'50" N.lat., 163°05'07" W.long.; this boundary aligns with the Cold Bay VORTAL cone and the headland located approximately two nautical miles south of the radar domes near Grant Point.

(28) Ilnik Lagoon: all waters of Ilnik Lagoon and Lake west of 159°30'12" W.long.;

(29) Herendeen Bay

(A) from May 1 through July 20, all waters within 500 yards of any salmon stream unless otherwise specified;

(B) after July 20, all waters south of the latitude of Bold Bluff Point (55°45'15" N.lat.) and within 500 yards of all salmon streams north of 55°45'15" N.lat.

(30) Nelson Lagoon: all waters of the lagoon and river (called Caribou, Nelson, and Lagoon River) flowing into the upper (west) end of Nelson Lagoon, upstream of a line from 55°57'20" N.lat., 161°22'15" W.long. to 55°57'45" N.lat., 161°22'40" W.long.

(31) Caribou Flats: all waters of the Caribou Flats Section;

(32) Cape Menshikof: all waters of the Cinder River Section located north of Loran C line 9990-Y-32920;

(33) King Salmon River:

(A) from May 1 through July 15, all waters within 1000 yards of the stream terminus;

(B) after July 15, all waters within 500 yards of the stream terminus.

5 AAC 09.355. SALMON PROCESSOR AND BUYER REPORTING REQUIREMENTS. The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

5 AAC 09.360. SOUTHEASTERN DISTRICT SALMON MANAGEMENT PLAN. (a) This plan pertains to the management of the interception of Chignik River sockeye salmon caught in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters inside of a line from Renshaw Point to the mouth of Osterback Creek.

(b) In years when a harvestable surplus for the first (Black Lake) and second (Chignik Lake) runs of Chignik River system sockeye salmon is expected to be less than 600,000, there will be no commercial salmon fishery allowed in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, as described in 5 AAC 09.200(f), until a harvest of 300,000 sockeye salmon in the Chignik Area, as described in 5 AAC 15.100, is achieved. After July 8, after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(c) In years when a harvestable surplus beyond escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000, but the first run fails to develop as predicted and it is determined that a total sockeye salmon harvest in the Chignik Area of 600,000 or more may not be achieved, the commercial salmon fishery in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will be curtailed in order to allow at least a minimum harvest in the Chignik Area of 300,000 sockeye salmon by July 9 if that number of fish are determined to be surplus to the escapement goals of the Chignik River system. After July 8 and after at least 300,000 sockeye salmon have been harvested in the Chignik Area, and if escapement goals are being met, the department shall manage the fishery so that the number of sockeye salmon harvested in the Chignik Area will be at least 600,000 and the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(d) In years when a harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon is expected to be more than 600,000 and the department determines the runs are as strong as expected, the department shall manage the fishery so that the number of sockeye salmon taken in the East Stepovak, West Stepovak, Balboa Bay, and Beaver Bay Sections will approach as near as possible 6 percent of the total Chignik sockeye salmon catch.

(e) The estimate of sockeye salmon destined for the Chignik River has been determined to be 80 percent of the sockeye salmon harvested along the mainland from the easternmost tip of McGinty Point to Suzy Creek and from the Stepovak Flats and the East Stepovak Sections. The remaining sockeye salmon taken in the mainland fishery have been determined to be destined for Orzinski Bay.

(f) The total Chignik sockeye salmon catch constitutes those sockeye salmon caught within the Chignik Area, plus 80 percent of the sockeye salmon caught in the East Stepovak, Stepovak Flats, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections, as described in 5 AAC 09.200(f), plus 80 percent of the sockeye salmon caught in the Cape Igvak Section of the Kodiak Area. The percentage of Chignik sockeye salmon may be permitted to fluctuate above or below 6 percent at any time before July 25.

(g) This allocation method will be in effect through July 25. The first fishing period of the commercial salmon fishing season in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections will not occur before the first fishing period of the commercial salmon fishing season in the Chignik Area. After July 25, commercial salmon fishing in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections may be allowed on local stocks.

(h) During the period from approximately June 26 to July 9, the strength of the second run of the Chignik River system sockeye salmon cannot be evaluated. In order to prevent overharvest of the second run, the department may disallow or severely restrict commercial salmon fishing in the East Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections during this period.

(i) The department shall announce commercial salmon fishing periods by emergency order. The department shall give at least one day's notice before the opening of a commercial salmon fishing period, unless it is an extension of a fishing period in progress.

5 AAC 09.365. SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE SALMON MANAGEMENT PLAN. (a) Mixed stocks of salmon bound for distant systems have historically been intercepted in significant numbers along the Alaska Peninsula. To ensure that none of these runs are overharvested, it is necessary to restrain their interception.

(b) The Alaska Board of Fisheries has established sockeye guideline harvest levels on the South Unimak and Shumagin Islands interception fisheries during June, which are based on percentages of the latest projected Bristol Bay inshore sockeye harvest as published by the Department of Fish and Game. The South Unimak fishery takes place in the Unimak District and the Ikatan Bay and Bechevin Bay Sections, as described in Sec. 200(c), (d)(1) and (b)(2) of this chapter. The Shumagin Islands fishery takes place in the Shumagin Islands Section, as described in Sec. 200(f)(3) of this chapter. Consistent with the board's Policy Statement on Management of Mixed Stock Salmon Fisheries and traditional harvest patterns, the maximum percentage allowed for the South Unimak fishery is 6.8 percent and for the Shumagin Islands fishery, 1.5 percent. The forecasts for Bristol Bay are sometimes updated as more information becomes available, just prior to the South Unimak and Shumagin Islands season, and exact numbers of fish cannot be given before the opening of each fishery.

(c) Guideline harvest levels are established with the understanding that catches will be distributed proportionally over the June runs to avoid excessive impacts on any segment of the runs. In order to accomplish this, the following guidelines will be adhered to as much as practicable:

Weekly Guideline Harvest Levels of Sockeye Salmon
(expressed as a percentage of the total allowable harvest)

Weekly Period	South Unimak	Shumagin Islands
June 1-4 & 5-11	5%	9%
June 12-18	29%	28%
June 19-25	51%	41%
June 26-30	15%	22%
	100%	100%

There may be no more than 96 hours of fishing allowed during any seven day week and no more than 72 consecutive hours of fishing at any time. The fishery must be closed for at least 24 hours following any opening of 72 consecutive hours. It is the preference of the board that the timing of the open and closed fishing periods be set to reduce excessive impacts on any segment of the runs. It is also the preference of the board that no more than 48 consecutive hours of fishing be allowed unless circumstances such as weather or attainment of the weekly guideline harvest levels require up to 72 consecutive hours of fishing.

(d) Weekly fishing periods will be announced by field emergency order, and they will be adjusted to keep the harvest within the weekly guidelines. If catches fall below the guidelines for a given weekly period, those unharvested sockeye will not be added into a subsequent weekly period. If weekly guideline harvest levels are inadvertently exceeded during any given fishing period, the excess will be a portion of the total guideline harvest level. If, during the last weekly fishing period, the staff determines that no significant fishing occurred due to weather conditions, the staff may, it its discretion, permit fishing to continue after June 30.

(e) The South Unimak and Shumagin Island June salmon fishery targets on the more abundant and valuable sockeye salmon. The board recognizes that the harvest of other

salmon species is incidental to the sockeye harvest. The board has determined that this incidental harvest is unavoidable and cannot be regulated with the present level of knowledge regarding this fishery. The board will not support any significant increase in the interception rate of chum salmon taken in the South Unimak and Shumagin Islands June salmon fishery. These stocks are probably fully utilized in existing terminal fisheries of long standing. This determination is consistent with the philosophy contained in the board's Policy Statement on Management of Mixed Stock Salmon Fisheries. The board recognizes that the conservation and allocation of non-targeted salmon stocks may be a concern during some years, but does not have the data to ensure specific corrective action at this time (Dec. 1982).

(f) The department shall close the June fishery if 500,000 chum salmon are taken before the sockeye salmon guideline harvest level is taken.

ARTICLE 4.—BOTTOMFISH FISHERY

5 AAC 09.410. FISHING SEASON. There is no closed season on bottomfish.

ARTICLE 5.—SMELT FISHERY

5 AAC 09.510. FISHING SEASON. There is no closed season on smelt.

ALEUTIAN ISLANDS AREA

CHAPTER 12.—ALEUTIAN ISLANDS AREA

ARTICLE 1.—DESCRIPTION OF AREA

5 AAC 12.001. APPLICATION OF THIS CHAPTER. Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in chs. 1 and 2 of this title.

5 AAC 12.100. DESCRIPTION OF AREA. The Aleutian Islands Area includes all waters of Alaska in the Aleutian Islands west of Cape Sarichef Light and west of a line extending from Scotch Cap through the easternmost tip of Ugamak Island.

ARTICLE 2.—FISHING DISTRICTS AND SECTIONS

5 AAC 12.200. DESCRIPTION OF DISTRICTS AND SECTIONS. (a) Akutan District: all waters between Scotch Cap and Cape Sarichef Light and extending west to and including Akutan Pass. South of Scotch Cap Light, the eastern boundary of the district is a line extending from Scotch Cap through the easternmost tip of Ugamak Island.

(b) Unalaska District: all waters west of Akutan Pass to and including Umnak Pass;

(1) Beaver Inlet Section: all waters between Cape Sedanka and Cape Kalekta and including Unalga Island;

(2) Unalaska Bay Section: all waters between Cape Kalekta and Cape Kovrizhka;

(3) Makushin Bay Section: all waters between Cape Kovrizhka and Spray Cape;

(4) Kashega Bay Section: all waters between Spray Cape and Konets Head;

(5) Southern Section: all waters between Konets Head and Cape Sedanka.

(c) Umnak District: all waters west of Umnak Pass to and including Atka Pass.

(d) Adak District: all waters west of Atka Pass to the terminus of the Aleutian Islands.

ARTICLE 3.—SALMON FISHERY

5 AAC 12.310. FISHING SEASONS. Salmon may be taken only from July 10 through September 30, except that in the Kashega Bay Section, salmon may be taken only from June 1 through September 30.

5 AAC 12.320. WEEKLY FISHING PERIODS. Salmon may be taken only as follows:

(1) June 1 through July 18, from 6:00 a.m. Monday until 6:00 p.m. Friday;

(2) from July 19 through September 30, salmon may be taken during open season only during fishing periods established by emergency order;

5 AAC 12.330. GEAR. Salmon may be taken by purse seines, hand purse seines and beach seines.

5 AAC 12.332. SEINE SPECIFICATIONS AND OPERATION. (a) Purse seines and hand purse seines may not be less than 100 fathoms nor more than 250 fathoms in length.

(b) Beach seines may not be less than 100 fathoms in length and 3 fathoms in depth, nor more than 250 fathoms in length and 12 fathoms in depth.

(c) No lead may be less than 25 fathoms nor more than 150 fathoms in length.

5 AAC 12.350. CLOSED WATERS. The waters of Inner Iliulik Harbor and Margrets Bay between the Unalaska-Dutch Harbor bridge and 166°32 ' W. long. are closed to the taking of salmon.

5 AAC 12.355. SALMON PROCESSOR AND BUYER REPORTING REQUIREMENTS. The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

ARTICLE 4.—BOTTOMFISH FISHERY.

5 AAC 12.410. FISHING SEASON. There is no closed season on bottomfish.

5 AAC 12.430. GEAR. Bottomfish may be taken by sunken gill nets under the authority of a permit issued by the commissioner or a local representative of the department. The permit may specify open areas, fishing periods, gear specifications and operating specifications, and may require completion by the vessel operator of a log book provided by the department.

ARTICLE 10. STATISTICAL AREA M; ALASKA PENINSULA—ALEUTIAN ISLAND AREA.

5 AAC 27.600. DESCRIPTION OF AREA. Statistical Area M includes all waters bound on the east by a line extending southeast (135°) from the southernmost tip of Kupreanof Point, on the west by the International Date Line, and on the north by a line extending west from the westernmost tip of Cape Menshikof.

5AAC 27.605. DESCRIPTION OF DISTRICTS AND SECTIONS. (a) Sand Point District: all waters on the south (Pacific) side of the Alaska Peninsula between the western boundary of the Chignik Area and 161° W. long.

(1) Stepovak Bay Section: all waters of the Sand Point District located north of 55°32′ N. lat. and east of 160° 30′ W. long.

(2) Swedania Point-Balboa Bay Section: all waters of the Sand Point District located between 160°31′ W. long. and 160° 47′ W. long., and north of 55°26′ N. lat.

(3) Point Aliaksin-Beaver Bay Section: all waters of the Sand Point District located between 160°47′W. long. and 161° W. long., and north of 55°26′ N. lat.

(4) General Section: all other waters of the Sand Point District.

(b) Pavlof District: all waters on the south (Pacific) side of the Alaska Peninsula between 161° W. long. and a line extending 150° from 55°05′ 54″ N. lat., 161°59′ W. long. through Inner and Outer Iliasik Islands, including Bear and Volcano Bays.

(1) Canoe Bay Section: all waters of Canoe Bay east of 161°21′ 45″ W. long.

(2) Pavlof Bay Section: all waters of Pavlof Bay north of 55°21′ 42″ N. lat. (latitude of Cape Tolstoi), excluding the Canoe Bay and Seal Cape—Wosnesenski Sections.

(3) Seal Cape-Wosnesenski Section: all waters of the Pavlof District located between 161°W. long. and 161°30′ W. long. (longitude of Cape Tolstoi).

(4) General Section: all other waters of the Pavlof District.

(c) King Cove District: all waters of the south (Pacific) side of the Alaska Peninsula between a line extending 150° from 55°05′ 54″ N. lat., 161°59′ W. long. through Inner and Outer Iliasik Islands and 163°30′ W. long., including waters of Isanotski Strait south of a line from Nichols Point to the False Pass dock.

(1) Belkofski Section: all waters of the King Cove District east of 162°15′ W. long. (longitude of Bold Cape).

(2) Deer Passage Section: all waters of the King Cove District between 162°15′ W. long. (longitude of Bold Cape) and 162°25′ W. long (longitude of Vodapoini Point), and north of 54°55′ N. lat., excluding all waters of Lenard Harbor.

(3) Cold Bay Section: all waters of the King Cove District bounded by a line from Thin Point to Vodapoini Point.

(4) General Section: all other waters of the King Cove District.

(d) Unimak District: all waters on the southside of Unimak Island between 163°30′ W. long. and the longitude of Scotch Cap Light.

(e) Akutan District: all waters extending west of Unimak Island to and including Akutan Pass.

(f) Unalaska District: all waters west of Akutan Pass to and including Umnak Pass.

(1) Unalaska Bay Section: all waters of the Unalaska Bay District enclosed by a line from Priest Rock at 54°00′24″ N. lat., 166°22′42″ W. long. to Cape Cheerful at 54°00′33″ N. lat., 166°37′45″ W. long.

(2) General Section: all waters of the Unalaska District not included in the Unalaska Bay Section.

(g) Umnak District: all waters west of Umnak Pass to and including Atka Pass.

(h) Adak District: all waters west of Atka Pass to the terminus of the Aleutian Islands.

(i) Amak District: all Bering Sea waters south and west of Cape Lieskof (55°47′ N. lat., 162°04′ W. long.) to the longitude of Cape Sarichef Light, including all waters of Bechevin Bay and Isanotski Strait north of a line from the False Pass Cannery dock to the tip of Nichols Point.

(j) Port Moller District: all Bering Sea waters between the latitude of Cape Lieskof and the latitude of Cape Seniavin (56°24′ N. lat.).

(1) Western Section: all waters of the Port Moller District west of the longitude of Wolf Point on Walrus Island, excluding the waters of Herendeen Bay and Deer Island—Mud Bay Sections.

(2) Deer Island—Mud Bay Section: all waters of the Port Moller District bounded by a line from the northernmost tip of Point Edward to the southernmost tip of Wolf Point on Walrus Island to Point Divide (55°53′10″ N. lat., 160°47′ W. long.) to the northernmost tip of Black Point.

(3) Herendeen Bay Section: all waters of Herendeen Bay south of a line from the northernmost tip of Black Point to Point Divide (55°53′ 10″ N. lat., 160°47′ W. long.).

(4) Inner Port Moller Bay Section: all waters of Port Moller Bay enclosed by a line from Point Divide (55°53'10" N. lat., 160°47' W. long.), to Harbor Point (55°55' N. lat., 160°34'30" W. long.).

(5) Outer Port Moller Bay Section: all waters of the Port Moller District south and east of a line from Point Divide (55°53'10" N. lat., 160°47' W. long.) to the southernmost tip of Wolf Point on Walrus Island to the southernmost tip of Entrance Point (55°59'30" N. lat., 160°34' W. long.).

(6) Bear River Section: all Bering Sea waters between the longitude of Wolf Point on Walrus Island and Cape Seniavin Light, excluding the waters of the Herendeen Bay, Deer Island-Mud Bay, Outer Port Moller Bay, and Inner Port Moller Bay Sections.

(k) Port Heiden District: all waters between the latitude of Cape Seniavin (56°24' N. lat.) and the latitude of Cape Menshikof (57°31'20" N. lat.).

5 AAC 27.610. FISHING SEASONS AND PERIODS. (a) In the Sand Point, Pavlof, King Cove, Unimak, Akutan, Unalaska, Umnak, and Adak Districts, herring may be taken from April 15 through July 15 (sac-roe season) and from July 16 through February 28 (food and bait season).

(c) In the Amak, Port Moller, and Port Heiden Districts, herring may be taken from April 15 through July 15 (sac roe season) and from August 15 through February 28 (food and bait season).

(d) Herring may be taken only during periods established by emergency order.

5 AAC 27.630. GEAR. Herring may be taken only by purse seines and gill nets, except as follows:

(1) in the Amak District, herring may be taken with trawls only from August 15 through February 28.

(2) in waters of the Bering Sea north of 55°47'N.lat., herring may be taken by trawls only during seasons established by emergency order.

5 AAC 27.631. GILL NET SPECIFICATIONS AND OPERATIONS. (a) During the herring sac roe season, the aggregate length of herring gill nets in use by a herring CFEC permit holder may not exceed 150 fathoms.

(b) The interim-use or entry permit holder must be physically present while the gill net is being fished.

(c) Each drift gill net in operation must have a buoy at one end and the opposite end must be attached to the fishing vessel. Each set gill net in operation must be anchored and buoyed at both ends. Each buoy must be plainly and legibly marked with the permanent vessel license plate number (ADF&G number) of the vessel operating the gear. The buoy may bear only a single number and this number must be that of the vessel used in operating the gear. The numbers must be painted on the top one-third of the buoy in numerals at least four inches in height, one-half inch in width and in a color

contrasting to that of the buoy. The buoy markings must be visible on the buoy above the water surface.

5 AAC 27.632. SEINE SPECIFICATIONS AND OPERATIONS. During the herring sac roe season, no purse seine may be more than 1,000 meshes in depth and more than 100 fathoms in length. During the herring food and bait season, no purse seine may be more than 250 fathoms in length.

5 AAC 27.650. WATERS CLOSED TO HERRING FISHING. (a) Herring may not be taken from June 25 through September 30 in any waters closed to salmon fishing.

5 AAC 27.660. HARVEST STRATEGY.

(b) The department shall manage the Sand Point, Pavlof, and King Cove Districts so that 75 percent of the estimated guideline harvest level of 1,200 s. tons is taken during the sac-roe season and 25 percent is taken during the food and bait season. If the 75 percent is not taken during the sac-roe season, then the amount of herring not taken may be allowed to be taken during the food and bait season. The department shall adjust the guideline harvest level based on herring biomass assessments conducted during the sac-roe season.

5 AAC 27.662. BUYER AND TENDER REPORTING REQUIREMENTS. In addition to the requirements of 5 AAC 39.130(f) each tender operator and each buyer or his agents shall report in person to and register with a local representative of the department upon arrival in the statistical area before commencing operations and before changing location of the operation. Each buyer shall:

(1) identify all vessels to be employed in transporting or processing herring and shall register such vessels with a local representative of the department located in the statistical area before transporting or processing of herring;

(2) make daily reports of all herring purchased from fishermen, and other processing records as specified by a local representative of the department; and

(3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

Emergency Order No. 4-F-M-09-88

Effective Date: 8:00 A.M. June 11, 1988

EXPLANATION:

This emergency order allows commercial salmon fishing from 8:00 A.M. until 10:00 P.M. during June 11 in the South Unimak and Shumagin Island fisheries.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 1-11 allocations are 25,000 and 63,000 to the Shumagin Islands and South Unimak fisheries respectively.

June 1-11 sockeye harvests are much stronger toward the end of the period than earlier. The percentage of the chums is generally high early in the June 1-11 period.

The Alaska Board of Fisheries has placed a 500,000 (fish) chum salmon catch ceiling on both fisheries combined. The fleet should be able to harvest the sockeye allocation during one day at the end of the period, therefore minimizing the June 1-11 chum salmon interception. Only light winds are forecasted for June 11.

Emergency Order No. 4-F-M-10-88

Effective Date: 8:00 A.M. June 15, 1988

EXPLANATION:

This emergency order allows an 8:00 A.M. until 5:00 P.M. commercial salmon fishing period during June 15 in the South Unimak fishery and an 8:00 A.M. until 8:00 P.M. June 15 fishing period in the Shumagin Islands.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined. A fishing period during June 11 indicated that chums make up at least 60 percent of the total sockeye and chum salmon migrating through the Shumagin Islands and South Unimak fisheries. The percentage of sockeye has tended to increase towards the end of June 12-18 period during past years. A short fishing period during June 15 will allow the fishermen an opportunity to test the chum percentage and catch part of the sockeye allocation. More fishing time is allowed in the Shumagins than at South Unimak because Shumagin seiners have to take turns setting, a fishing period less than 12 hours may not enable each boat a chance to fish.

Emergency Order No. 4-F-M-11-88

Effective Date: 5:00 P.M. June 15, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time during June 15 to 10:00 P.M. and establishes 8:00 A.M. until 5:00 P.M. and 8:00 A.M. to 8:00 P.M. fishing periods during June 16 in the South Unimak and Shumagin Islands respectively.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined. Presently less than half of the fleet is fishing due to a price dispute and the percentage of chum salmon appears to have decreased to approximately 40 to 50 percent from the 60 percent experienced during the June 11 fishing period at South Unimak. Only set gillnet gear is being used in the Shumagins and the chum salmon catch is anticipated to be light. The South Unimak and Shumagin Islands June Salmon Management Plan also limits the amount of hours that can be fished during a seven day period.

Extensions during June 15 and reopenings during June 16 will enable the fleet to harvest more of their allocation while still conserving hours that can be used when the entire fleet is fishing. It does not appear that the present fishing effort will be able to catch the sockeye allocations.

Emergency Order No. 4-F-M-12-88

Effective Date: 6:00 P.M. June 15, 1988

EXPLANATION:

This emergency order extends the fishing period until 10:00 P.M. Thursday during the week of June 12-18 in the Ilnik Section.

JUSTIFICATION:

High winds have prevented any fishing during Tuesday and Wednesday during the week of June 12-18 in the Ilnik Lagoon (the only part of the Ilnik Section where the season is open). An extension until 10:00 P.M. Thursday will enable the fishermen to make up for at least part of their lost fishing time. Effort is low and a short extension due to weather is not considered a threat to the stocks at this time.

Emergency Order No. 4-F-M-13-88

Effective Date: 5:00 P.M. June 16,1988

EXPLANATION:

This emergency order extends commercial salmon fishing time until 10:00 P.M. June 16 in the South Unimak fishery and until 10:00 P.M. June 17 in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined. The Board of Fisheries also placed limitations on the number of hours that can be fished during a seven day period.

Due to the price dispute no seiners and approximately 60 percent of the gill net fleet are fishing. The June 15 catch was 49,500 sockeye and 45,000 chums at South Unimak and 6,600 sockeye and 700 chums in the Shumagins. Preliminary reports from the grounds indicate the chum percentage is declining. More fishing time is needed to harvest the balance (approximately 316,000 at South Unimak and 71,000 in the Shumagins) of the June 12-18 sockeye

allocations. Due to the very low chum catches in the Shumagins, a 24 hour fishing period extension can be granted at this time. At South Unimak, substantial numbers of chums are being taken although the rate is declining. A 5 hour extension of the fishing period at South Unimak will allow the fleet to harvest more of the sockeye allocation and should not increase the chum catch to an unacceptable level.

Emergency Order No. 4-F-M-14-88

Effective Date: 6:00 A.M. June 18, 1988

EXPLANATION:

This emergency order allows a 6:00 A.M.until 12:00 A.M. Noon commercial salmon fishing period during June 18 in the South Unimak fishery and a 6:00 A.M. until 6:00 P.M. commercial salmon fishing period during June 18 in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined. The Board of Fisheries also placed limitations on the number of hours that can be fished during a seven day period.

During 14 hour fishing periods during June 15 and 16, 105,000 chum salmon were caught at South Unimak when most fishermen were on strike. There are reports of large numbers of chums in the Shumagins by seiners testing their gear during the strike. It is anticipated that the entire fleet will be fishing during June 18 and may increase the chum catch up to where it is impossible for the fleet to have an opportunity to harvest the June 19-25 guideline harvest levels (the largest of the season). Short fishing periods should enable the fleet to test the numbers of chums without catching an unacceptable high number. If the chum percentage is low, extensions can be granted to allow the fleet a last chance at the June 12-18 sockeye allocation. A longer period is allowed in the Shumagins than at South Unimak because Shumagin seiners have to take turns setting, a fishing period less than 12 hours may not enable each boat a chance to fish.

Emergency Order No. 4-F-M-16-88

Effective Date: 6:00 P.M. June 18, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing 4 hours until 10:00 P.M. during June 18 in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined.

Prior to June 18, the June 12-18 Shumagin Island sockeye catch was 31,000. Observations during the current period beginning 6:00 A.M. indicate that the chum salmon percentage is not excessively high and fishing time during the evening tide will be needed for the fleet to harvest their sockeye allocation.

Emergency Order No.4-F-M-17-88

Effective Date: 7:00 A.M. June 21, 1988

EXPLANATION:

This emergency order allows a 7:00 A.M. until 2:00 P.M. commercial salmon fishing period during June 21 in the South Unimak fishery and a 7:00 A.M. until 7:00 P.M. commercial salmon fishing period during June 21 in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established sockeye guideline harvest levels of 1.5% for the Shumagin Islands and 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 12-18 allocations are 78,000 and 366,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling for both the South Unimak and Shumagin Islands fisheries combined.

Fishing time is needed to harvest the sockeye allocations. More fishing time is allowed in the Shumagins than at South Unimak because the chum percentage was much lower in the Shumagins during the previous fishing period than at South Unimak. Also, a fishing period less than 12 hours in the Shumagins may not allow each boat to fish as it is necessary to take turns setting.

Emergency Order No. 4-F-M-18-88

Effective Date: June 21, 1988

EXPLANATION:

This emergency order closes commercial salmon fishing in the Urilia Bay Section until periods are announced by subsequent emergency order.

JUSTIFICATION:

A recent survey of Urilia Bay indicated that the escapement was light, probably less than 2,000 sockeye. Catches during the previous weekend totaled only 8,500 sockeye despite intense fishing effort. A one day fishery during June 20 will determine run strength. The closure after June 20 will enable the department to monitor the escapement before allowing further harvesting. The Urilia Bay sockeye escapement goal is 30,000 to 40,000.

Emergency Order No. 4-F-M-19-88

Effective Date: 2:00 P.M. June 21, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time until 10:00 P.M. during June 21 in both the Shumagin Islands and South Unimak fisheries.

JUSTIFICATION:

The Alaska Board of Fisheries has established a guideline harvest level for sockeye of 1.5% for the Shumagin Islands and a 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 19-25 allocations are 115,000 and 644,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling on both the South Unimak and Shumagin Island fisheries combined. The Board also placed a limit on the amount of fishing allowed during a seven day period.

The South Unimak sockeye catch is reported to be low. Chum percentages are high in part of the area, but the overall catch is not anticipated to be excessive. An extension into the night of June 21 will enable the fleet to determine if the sockeye are running stronger during the evening. The Shumagin Islands chum percentage is low and more time can be granted to increase the sockeye harvest.

Emergency Order 4-F-M-20-88

Effective Date: 3:00 P.M. June 22, 1988

EXPLANATION:

This emergency order establishes a 3:00 P.M. June 22, until 10:00 P.M. June 23 commercial salmon fishing period in the South Unimak fishery and a 4:00 A.M. June 23 until 10:00 P.M. June 24 commercial salmon fishing period in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established a guideline harvest level for sockeye of 1.5% for the Shumagin Islands and a 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 19-25 allocations are 115,000 and 644,000 to the Shumagin Islands and South Unimak fisheries respectively.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling on both the South Unimak and Shumagin Island fisheries combined. The Board also placed a limit on the amount of fishing allowed during a seven day period.

The June 19-25 sockeye harvests in the Shumagin Islands and South Unimak fisheries is 39,300 and 79,500 respectively. More fishing time is needed to harvest the sockeye allocation. The total chum salmon harvest from both fisheries combined is 268,000, of which only 11% was taken in the Shumagins. Based on the June 21 chum catch of 63,000, a 31 hour period at South Unimak is not anticipated to cause the total harvest to reach the ceiling.

Emergency Order No. 4-F-M-21-88

Effective Date: 6:00 A.M. June 27, 1988

EXPLANATION:

This emergency order establishes a 6:00 A.M. until 10:00 P.M. commercial salmon fishing period during June 27 in the South Unimak fishery and a 6:00 A.M. until 6:00 P.M. fishing period during June 27 in the Shumagin Islands Section.

JUSTIFICATION:

The Alaska Board of Fisheries has established a guideline harvest level for sockeye of 1.5% for the Shumagin Islands and a 6.8% for the South Unimak June salmon fisheries based on the Department of Fish and Game forecast for the Bristol Bay inshore salmon harvest. The total sockeye allocations to each fishery are broken down into time period guideline harvest levels. The June 26-30 allocation is 190,000 and there are 22,000 sockeye left to be taken in the second allocation to the Shumagins.

The Board of Fisheries has also established a 500,000 chum salmon catch ceiling on both the South Unimak and Shumagin Island fisheries combined.

The combined chum salmon harvest is 81,000 below the ceiling. Due to the fact that a large portion of the drift gillnet fleet is anticipated to move to Port Moller, a 16 hour fishing period at South Unimak combined with a 12 hour fishing period in the Shumagins is anticipated to result in a season chum harvest of under 500,000 fish. A 12 hour fishing period is estimated to be adequate time for the remaining Shumagin allocation to be taken.

Emergency Order No. 4-F-M-22-88

Effective Date: 4:00 A.M. June 27, 1988

EXPLANATION:

This emergency order establishes a 4:00 A.M. until 12:00 P.M. midnight commercial salmon fishing period in the Urilia Bay Section. It also corrects the longitude of Otter Point which is incorrectly printed in the regulation by establishing the correct fishing period for the area intended to be in the Urilia Bay and Swanson Lagoon Sections.

JUSTIFICATION:

There is an inaccuracy in the longitude of Otter Point listed in the regulation book. The book also failed to include weekly fishing periods for the Swanson Lagoon Section.

A large number of sockeye salmon are appearing in Urilia Bay and there were unusually large chum catches a week ago. A 20 hour fishery during June 27 will allow the fleet to test run strength and harvest the resource.

Emergency Order No. 4-F-M-23-88

Effective Date: June 27, 1988

EXPLANATION:

This emergency order closes the commercial salmon fishing season in that portion of the Bear River Section located between a point 2,000 yards northeast of Sandy River and a point 1,000 yards southwest of King Salmon River.

JUSTIFICATION:

The Bear River sockeye escapement is only 8,000. During the past 5 years, escapements by this date have all been in the 20,000 to 50,000 range. The goal through July 15 is 110,000 to 125,000. Catches during the previous week indicate a very strong run and there are presently large numbers of fish near the river mouths. Closing the area from Sandy River to King Salmon River will protect the fish in the terminal area until an adequate number enter the river while allowing the fleet to harvest incoming fish.

Emergency Order No. 4-F-M-24-88

Effective Date: 2:00 P.M. June 28, 1988

EXPLANATION:

This emergency order:

1. Reopens the commercial salmon season between King Salmon River and Sandy River, effective 2:00 P.M. June 28.

2. Extends commercial salmon fishing time until 10:00 P.M. Thursday June 30 in Ilnik Lagoon and the Port Heiden Section.

3. Establishes a 4:00 A.M. until 12:00 P.M. midnight fishing period in the Urilia Bay Section during Wednesday June 29.

JUSTIFICATION:

The Bear River sockeye escapement is now at 60,000 and anticipated to reach 80,000 by the end of the day. The July 15 goal of 110,000 to 125,000 is now within easy reach and there is no longer a need for the King Salmon River to Sandy River closure, now in effect.

The sockeye escapement of 10,000 at Ilnik Lagoon is good for this date and catches indicate a strong run. The June 27 Port Heiden catch of 1,400 sockeye and 1,800 chums by 5 gillnetters is very good. More fishing time is justified to harvest the resource.

The June 27 Urilia Bay sockeye catch of 20,000 indicates a very strong run and another harvest should be allowed at this time.

Emergency Order No. 4-F-M-25-88

Effective Date: June 30, 1088

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 12:00 P.M. Friday July 1 in the Nelson Lagoon Section. Fishing time in the Bear River, Three Hills, and Herendeen-Moller Bay Sections is extended 28 hours until 10:00 P.M. Friday July 1.

JUSTIFICATION:

Large numbers of chum salmon are being caught in the vicinity of Port Moller indicating strong runs into Herendeen and Port Moller Bays. The Bear River sockeye escapement through the weir is 83,000 and only low daily counts are needed to reach the July 15 goal of 10,000 to 125,000. The Nelson Lagoon sockeye escapement past the counting tower is 44,500 well above the June goal of 30,000. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-26-88

Effective Date: July 1, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time until 6:00 P.M. Thursday July 7 in the Inner Port Heiden, Three Hills Bear River and Herendeen-Moller Bay Sections.

JUSTIFICATION:

Port Heiden sockeye catches indicate strong run and effort consists of only one gillnet fishermen. High chum salmon catches by three gillnet fishermen at Port Moller indicate strong runs into Herendeen and Moller Bay where there is presently no effort. The Bear River sockeye escapement is 101,000 and is approaching the July 15 target of 110,000 to 125,000. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-27-88

Effective Date: July 3, 1988

EXPLANATION:

This emergency order establishes 6:00 A.M. Monday until 6:00 P.M. Thursday commercial salmon fishing periods in the Bechevin Bay Section effective July 3 through August 10.

JUSTIFICATION:

Chum salmon runs are now getting underway in the Bechevin Bay Section and fishing time is needed to harvest the resource. This emergency order establishes the same weekly fishing periods that are established in the adjacent Swanson Lagoon and Izembek-Moffet Bay Sections.

Emergency Order No. 4-F-M-28-88

Effective Date: 4:00 A.M. July 6, 1988

EXPLANATION:

This emergency order establishes a 4:00 A.M. July 6 until 10:00 P.M. July 7 fishing period in the following locations:

1. Northwest Stepovak Section
2. Shumagin Islands Section
3. South Central and Southwestern Districts
4. The Otter Cove and Sanak Island Sections of the Unimak District.

JUSTIFICATION:

Local chum salmon runs should be underway as well as the Orzinski Bay sockeye return. Fishing time is needed to test run strength and to allow a harvest.

Emergency Order No. 4-F-M-29-88

Effective Date: 6:00 P.M. July 6, 1988

EXPLANATION:

This emergency order adds 24 hours to each fishing period during July in the Ilnik Section. This means that during July, fishing periods in the Ilnik Section are 6:00 A.M. Monday until 6:00 P.M. Thursday, the same as published in the regulation book prior to 1988.

Continuous fishing is allowed until 6:00 P.M. July 14 in the Bear River, Three Hills, Inner Port Heiden, and Herendeen-Moller Bay Sections.

JUSTIFICATION:

The Ilnik sockeye escapement has reached the lower end of the 25,000 to 50,000 goal. The Alaska Board of Fisheries shortened the weekly fishing period 24 hours as a safeguard against increased fishing effort causing the escapement top fall below the goal. During the remainder of the 1988 sockeye run, the reduced Ilnik fishing periods are no longer needed.

The Port Heiden sockeye escapement of 18,000 plus has reached the goal and effort consists of only one set gillnetter. The Bear River sockeye escapement has reached the lower end of the 110,000 to 125,000 through July 15 goal and is anticipated to hit the high end of the goal while allowing continuous fishing. The Herendeen-Moller Bay chums salmon run is anticipated to be very strong and early catches indicate a strong run. Herendeen-Moller Bay effort is light and more fishing time should be allowed before fish quality deteriorates (typical of this section).

Emergency Order No. 4-F-M-30-88

Effective Date: 4:00 A.M. July 11, 1988

EXPLANATION:

This emergency order establishes a 4:00 A.M. July 11 until 10:00 P.M. July 12 commercial salmon fishing period in Stepovak Flats and Northwest Stepovak Sections. A 4:00 A.M. July 11 until 10:00 P.M. July 13 commercial salmon fishing period is established for the South Central and Southwestern Districts and that portion of the Unimak District located east of the longitude of Cape Aksit.

JUSTIFICATION:

The July 6-7 catch of approximately 135,000 chums indicated strong South Peninsula runs and fishing time is needed for the fleet to harvest the resource. The July 6-7 Northwest Stepovak Section catch was 9,500 sockeye and the escapement into Orzinski Lake is over 3,000 sockeye, indicating that the Orzinski run is strong.

Emergency Order No. 4-F-M-32

Effective Date: July 13, 1988

EXPLANATION:

This emergency order closes the commercial salmon season in the Bear River Section after July 12.

JUSTIFICATION:

Even though the Bear River escapement (117,000) is in the 110,000 to 125,000 goal range through July 15, the daily escapements have been under 2,500 since June 30 and under 400 during the previous two days. A closure at this time is needed in order to spread out the escapement and reduce the possibility of overexploitation of particular segments of the run. The closure also will allow for the achievement of part of the July 16 - August 5 Bear River escapement goal. This closure protects fish in the terminal area while allowing fishermen to harvest fish entering the area through the Three Hills and Ilnik Sections. Once an adequate number of sockeye pass through the Bear River weir, the Bear River Section will be reopened by subsequent emergency order.

Emergency Order No. 4-F-M-33-88

Effective Date: 6:00 P.M. July 14, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 6:00 P.M. Friday during the week of July 10-16.

JUSTIFICATION:

The Joshua Green River chum salmon escapement is estimated to be 52,000 which is very good for this date. High winds are preventing the fleet from fishing at the present. More fishing time can be allowed at this time without jeopardizing the resource.

Emergency Order No. 40-F-M-34-88

Effective Date: 4:00 A.M. July 18, 1988

EXPLANATION:

This emergency order establishes a 4:00 A.M. July 18 until 10:00 P.M. July 19 commercial salmon fishing period in Stepovak Flats and Northwest Stepovak Sections. A 4:00 A.M. July 18 until 10:00 P.M. July 20 commercial salmon fishing period is established for the South Central and Southwestern Districts and that portion of the Unimak District located east of the longitude of Cape Aksit.

JUSTIFICATION:

A strong South Peninsula pink salmon run is anticipated. The chum salmon catch during July 13 indicated that the run is increasing. The Orzinski sockeye escapement is estimated to be in excess of 3,500 which is very good for this date. Fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-35-88

Effective Date: July 18, 1988

EXPLANATION:

This emergency order closes commercial salmon fishing periods in the Swanson Lagoon Section, until reestablished by subsequent emergency order.

JUSTIFICATION:

The Swanson Lagoon chum salmon escapement is only 2,000 into the creek. Intensive effort during the past week in the lagoon makes any immediate increase in the escapement unlikely. The minimum chum salmon escapement should be 5,000 and an optimum escapement would be 10-20,000. A closure is needed at this time to increase the escapement.

Emergency Order No. 4-F-M-36-88

Effective Date: 6:00 P.M. July 17, 1988

EXPLANATION:

This emergency order reopens the commercial salmon fishing season in the Bear River Section and establishes a 6:00 P.M. Thursday fishing period during the week of July 17-23 in the Bear River, Three Hills, and Herendeen-Port Moller Bay Sections during the open season.

JUSTIFICATION:

The Bear River sockeye escapement through the weir is increasing dramatically and a large portion of the July 16 - August 5 escapement goal will be achieved by 6:00 P.M. July 17. Large numbers of chum salmon have been observed in Herendeen Bay and a harvest should be allowed before fish quality rapidly deteriorates (a characteristic of Herendeen Bay).

Emergency Order No. 4-F-M-37-88

Effective Date: 6:00 P.M. July 21, 1988

EXPLANATION:

This emergency order extends the weekly fishing period 24 hours until 6:00 P.M. Friday during the week of July 17-23 in the Bear River and Three Hills Sections and that portion of the Herendeen-Moller Bay Section enclosed by a line from Harbor Point to Entrance Point. The fishing period during the week of July 17-23 is extended 24 hours until 12:00 P.M. Midnight in the Nelson Lagoon Section.

JUSTIFICATION:

The Bear River sockeye escapement through the weir is 28,000 for the July 16-August 5 period, over half of the 40,000-50,000 goal for this period as of July 19.

The Nelson Lagoon sockeye escapement by the counting tower is 125,000 through July 19, well above the July 20 intermediate goal of 115,000. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-38-88

Effective Date: 12:00 A.M. Noon, July 23, 1988

EXPLANATION:

This emergency order establishes a 12:00 Noon July 23 until 10:00 P.M. July 24 commercial salmon fishing period in the Northwest Stepovak and Stepovak Flats Sections. A 12:00 Noon July 23 until 10:?00 P.M. July 25 commercial salmon fishing period is established for the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

JUSTIFICATION:

Recent catches along the capes indicate that strong pink and chum runs are entering the area. The Orzinski sockeye escapement is good for this date and recent catches indicate a strong run. Fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-39-88

Effective Date: 4:00 A.M. July 24, 1988

EXPLANATION:

This emergency order:

1. Extends commercial salmon fishing time 24 hours until 10:00 P.M. July 25 in the Northwest Stepovak, and Stepovak Flats Sections.

2. Allows a 4:00 A.M. July 24 until 10:00 P.M. July 25 commercial salmon fishing period in the Beaver Bay, Balboa Bay, Southwest Stepovak, and East Stepovak Sections.

3. Allows a 6:00 A.M. until 10:00 P.M. commercial salmon fishing period during July 25 in the Aleutian Islands Area.

JUSTIFICATION:

The Stepovak Flats chum run looks strong and a recent survey showed an Orzinski sockeye escapement of 16,400 (within the season goal range). More fishing time is needed to harvest the resource.

The Chignik sockeye catch is projected to reach 600,000 by July 24. Fishermen in the Beaver Bay, Balboa Bay, Southwest Stepovak, and East Stepovak Sections are allocated 6% of the total Chignik destined sockeye catch through July 25 if the Chignik Area catch is projected to reach 600,000. Fishing time is needed for fishermen to take their allocation.

Aleutian Island pink runs are anticipated to be mediocre but could be stronger than projected. Effort level is expected to be less than four boats. A short fishing period to test run strength at this time can be allowed without jeopardizing the resource.

Emergency Order No. 4-F-M-40-88

Effective Date: 10:00 P.M. July 25, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 10:00 P.M. July 27 in that portion of the Alaska Peninsula Area's South (Pacific) side located east of the longitude (163°37'18" W. long.) of Rock Island.

JUSTIFICATION:

The South Peninsula chum runs are much stronger than projected, with the to date post June catch surpassing the season projection by approximately 100,000 fish. South Peninsula pink salmon catches are projected to be 6,000,000 fish. Catches since noon July 23 total nearly 300,000 fish and indicate large numbers of pinks are moving into the area. More fishing time is needed to harvest the resource at this time while the fish are high in quality and before a build up of pinks overextends processing capabilities.

EMERGENCY ORDER NO. 4-F-M-88

EFFECTIVE DATE: 6:00 A.M. July 29, 1988

EXPLANATION:

This emergency order allows a 6:00 A.M. until 10:00 P.M. commercial salmon fishing period during July 29 in the Aleutian Islands Area.

JUSTIFICATION:

The July 25 salmon catch produced a strong pink salmon catch with very light effort despite the fact that a mediocre return was anticipated to this area. Another fishing period on July 29 will allow the fishermen to harvest the resource and provide another test of run strength.

EMERGENCY ORDER NO. 4-F-M-42-88

EFFECTIVE DATE: 4:00 a.m. July 31, 1988

EXPLANATION:

This emergency order allows a 4:00 A.M. July 31 until 10:00 P.M. August 1 commercial salmon fishing period along the Alaska Peninsula Area's south (Pacific) side. The closed waters at the head of Stepovak Bay remains the same as before July 29, during July 30 through August 1.

JUSTIFICATION:

South Peninsula chum salmon runs are very strong and there appears to be large numbers of pink salmon outside of bays. A 42 hour fishing period will allow the fishermen to harvest chum salmon and test pinks salmon run strength. Stepovak chum runs are very strong and a greater harvest should be allowed now due to the possibility of a complete fishery closure later due to weak pink salmon returns.

EMERGENCY ORDER NO. 4-F-M-43-88

EFFECTIVE DATE: 6:00 A.M. August 1, 1988

EXPLANATION:

This emergency order supersedes emergency orders 4-F-M-24-88 and 4-F-M-35-88 in regards to the Urilia Bay and Swanson Lagoon Sections, and reestablishes 6:0-0 A.M. Monday until 6:00 P.M. Thursday fishing periods.

JUSTIFICATION:

Urilia Bay sockeye are well within protected waters and fishing time is needed to harvest chum salmon. The minimum Swanson Lagoon chums salmon escapement goal of 5,000 has been exceeded and large numbers of chums are still entering the lagoon. The closure of Swanson Lagoon is no longer necessary.

EMERGENCY ORDER NO. 4-F-M-44-88

EFFECTIVE DATE: 10:00 p.m. August 1, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing 24 hours until 10:00 P.M. August 2 along the Alaska Peninsula Area's south (Pacific) side. The closed waters at the head of Stepovak Bay remains the same as before July 29, during July 30 through August 2.

JUSTIFICATION:

High winds have prevented much of the fleet from fishing during July 31. However, what fishing did occur indicated large numbers of pinks and chums are moving into the area. More fishing time is justified to make up for time lost to weather. The chum run at the head of Stepovak Bay is very strong and additional fishing time can be allowed at this time without jeopardizing the resource.

EMERGENCY ORDER NO. 4-F-M-45-88

EFFECTIVE DATE: 4:00 A.M. August 5, 1988

EXPLANATION:

This emergency order allows a 4:00 A.M. August 5 until 10:00 P.M. August 6 commercial salmon fishing period along all of the Alaska Peninsula's south (Pacific) side except that portion of the Cold Bay Section located north of the latitude of Delta Point Light.

JUSTIFICATION:

South Peninsula pink and chum salmon catches continue to be very strong, indicating large numbers of fish coming into the area. Weather has prevented escapement surveys during the past 5 days. A two day closure of the fishery should allow a significant escapement during strong runs. At this point the fishery should not be closed longer than two days as the buildup will likely overburden processing capabilities. A 44 hour fishing period during August 5 and 6 will allow for a harvest after a two day closure. If weather will cooperate, escapement counts will be done before the end of the fishing period. The north end of Cold Bay will remain closed to enable Russel Creek Hatchery to obtain a large brood stock.

EMERGENCY ORDER NO. 4-F-M-46-88

EFFECTIVE DATE: 2:00 P.M. August 4, 1988

EXPLANATION:

This emergency order allows a 2:00 P.M. August 4 until 10:00 P.M. August 9 fishing period in that portion of Iliuliuk Bay and south channel to Iliuliuk Harbor (excluding closed waters described in 5 AAC 12.350) enclosed by the latitude of the southern tip of Amaknok Island and the latitude of the eastern tip of Rocky Point.

JUSTIFICATION:

The Iliuliuk River (locally known as Town Creek) received a good pink salmon escapement during the parent year (1986) and is presently receiving a healthy escapement. However, parent pink salmon escapements to other Aleutian Island streams were generally very poor and there are no known indications of surplus pinks outside of the Iliuliuk River vicinity. Fishing time is justified to harvest Iliuliuk River fish only at this time in the Aleutian Islands Area.

EMERGENCY ORDER NO. 4-F-M-47-88

EFFECTIVE DATE: 6:00 P.M. August 4, 1988

EXPLANATION:

This emergency order extends commercial fishing time 24 hours until 6:00 P.M. Friday August 5 in the Izembek-Moffet Bay Section.

JUSTIFICATION:

The Izembek-Moffet Bay chum salmon run is strong and effort is light, consisting of only 4 boats. There was no fishing during Wednesday due to high winds and very little effort presently because of weather. A 24 hour extension can be granted at this time to make up for time lost to weather, without jeopardizing the resource.

EMERGENCY ORDER NO. 4-F-M-48-88

EFFECTIVE DATE: 10:00 P.M. August 6, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 10:00 P.M. August 8 in the Deer Island, Shumagin Islands, and East Stepovak Sections. The closed waters at Southern and Eastern Creeks on Deer Island are reduced to include only those waters upstream from the stream terminus at the ocean shoreline effective August 7.

JUSTIFICATION:

Pink salmon catches are unusually strong in the Shumagin Islands, East Stepovak, and Deer Island Sections. Escapements are good for this date in the Shumagin Islands and Deer Island Sections and it is too early to expect significant numbers of salmon in the East Stepovak Section streams. The pink salmon escapements are estimated to be 21,000 and 90,000 plus in Eastern and Southern Creeks, respectively, and are judged to be the optimum levels. More fishing time and area is justified to harvest the resource.

EMERGENCY ORDER NO. 4-F-M-49-88

EFFECTIVE DATE: 10:00 P.M. August 9, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time seven days until 10:00 P.M. August 16 in that portion of the Iliuliuk Bay and south channel to Iliuliuk Harbor enclosed by the latitude of the southern tip of Amaknok Island and the latitude of the eastern tip of Rocky Point. The closed waters of Inner Iliuliuk Harbor are reduced to include only those waters within 200 yards of the terminus of Iliuliuk River (also known as Unalaska Village Creek or Town Creek).

JUSTIFICATION:

The Iliuliuk River stream escapement is estimated at 7-8,000 pinks with another 8,000 pink salmon at the mouth. When the fish at the mouth enter the stream, the escapement will be at the optimum level. More time and fishing area is justified to harvest the resource.

EMERGENCY ORDER NO. 4-F-M-50-88

EFFECTIVE DATE: 10:00 P.M. August 9, 1988

EXPLANATION:

This emergency order closes the Bechevin Bay and Swanson Lagoon Sections to commercial salmon fishing until fishing periods are announced by subsequent emergency order. This emergency order supersedes emergency orders 4-F-M-22-88 and 4-F-M-43-88 in regards to the Bechevin Bay and Swanson Lagoon Sections.

JUSTIFICATION:

Swanson Lagoon sockeye escapements total less than 5,000 and are below the desired level of 120,000 to 15,000. A closure at this time is needed to obtain a larger escapement. The runs now entering the Bechevin Bay Section are similar to the South Peninsula runs. Therefore it is desirable top open the Bechevin Bay Section simultaneous to fishing periods in the adjacent portion of the Peninsula.

EMERGENCY ORDER NO. 4-F-M-51-88

EFFECTIVE DATE: 4:00 A.M. August 11, 1988

EXPLANATION:

This emergency order allows a 4:00 A.M. August 11 until 10:00 P.M. August 12 commercial salmon fishing period in the Unimak District, Bechevin Bay Section, Pavlof Bay Section, Canoe Bay Section, Shumagin Islands Section, and all sections of the Southwestern District except the Morzhovoi Bay Section.

The following closed waters are made:

1. Waters within 3 nautical miles of the southwest tip of Cape Tolstoi are closed.

2. The closed waters at Thin Point Cove are reduced to include only those waters within 1,500 yards of the Thin Point Lagoon terminus and upstream from the mouth at the ocean shoreline of the stream flowing into the northwest corner of Thin Point Cove.

3. The closed waters at Deadman's Cove Creek are reduced to include only those waters located upstream from the terminus at the ocean shoreline.

JUSTIFICATION:

Large numbers of pink and chum salmon are moving into the bays and streams along much of the South Peninsula. Catches during the previous fishing period indicated large numbers of both species. Fishing time is needed to harvest the resource.

The pink salmon runs to the Mino Creek-Little Coal Bay Section are weak and the area around Cape Tolstoi (located in the Pavlof Bay Section) should be closed to protect these stocks. The Thin Point Lagoon sockeye run is mostly over, a healthy escapement has been achieved, and large numbers of pink salmon are entering Thin Point Cove's other salmon stream. A 1,500 yard closure at the terminus of Thin Point Lagoon will prevent backout sockeye from being caught while allowing fishermen to harvest pinks at the other system which has enough escapement. The Deadman's Cove pink salmon escapement of 52,600 is at the optimum level for that system.

Emergency Order 4-F-M-52-88

Effective Date: 6:00 P.M. August 11, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 10:00 P.M. August 13 in the Unimak District, Bechevin Bay Section, all of the Southwestern District except the Morzhovoi Bay Section, Pavlof Bay Section, Canoe Bay Section, and Shumagin Islands Section. The Balboa and East Stepovak Sections are open to commercial salmon fishing from 6:00 P.M. August 12 until 10:00 P.M. August 13.

The closed waters in Lefthand Bay are reduced to include only those waters west of a line from the eastern edge of Foster Creek's terminus to the closed waters coordinates on the south side of the bay as described in the 1988 Commercial Finfish Regulation Book. This closed waters reduction is only in effect during the fishing period ending August 13 at 10:00 P.M. in the Balboa Bay Section.

JUSTIFICATION:

Aerial surveys of salmon escapements plus catch strength in that portion of the South Peninsula presently open to commercial salmon fishing indicate that pink and chum salmon runs are strong enough to justify more fishing time. Large numbers of pink salmon in excess of escapement needs are presently between Foster

Creek and the north marker in Lefthand Bay (Balboa Bay Section) and the east Stepovak Section.

Emergency Order No. 4-F-M-53-88

Effective Date: 10:00 P.M. August 13, 1988

EXPLANATION:

This emergency order:

1. Extends commercial salmon fishing 96 hours until 10:00 P.M. August 17 in the Deer Island and Thin Point Sections.

2. Establishes a 6:00 A.M. August 15 until 10:00 P.M. August 17 commercial salmon fishing period in the Shumagin Islands Section.

3. Establishes a 6:00 A.M. August 16 until 10:00 P.M. August 17 commercial salmon fishing period in the following locations:

Bechevin Bay Section	Belkofski Bay Section
Unimak District	Volcano Bay Section
Ikatan Bay Section	General Section of
Cold Bay Section	Southwestern District
Canoe Bay and Pavlof Bay Sections	

JUSTIFICATION:

Pink and chum salmon runs continue to be strong throughout much of the South Peninsula, especially in the Thin Point, Deer Island, and Shumagin Islands Sections. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-54-88

Effective Date: 4:00 P.M. August 14, 1988

EXPLANATION:

This emergency order allows commercial salmon fishing up to the terminus at the ocean shoreline of all streams in the Deer Island Section during open fishing periods from 4:00 P.M. August 13 through the end of August.

JUSTIFICATION:

Optimum pink salmon escapement levels have been reached in all Deer Island streams.

Emergency Order 4-F-M-55-88

Effective Date: August 15, 1988

EXPLANATION:

This emergency order closes the commercial salmon fishing season in that portion of the Bear River Section located between 500 yards southwest of King Salmon River and the Bear River church.

JUSTIFICATION:

The post August 5 Bear River sockeye escapement goal is 50,000 fish excluding jacks, through August 31. Fishing effort is unusually intense for this time of year and daily counts are anticipated to drop greatly if the fleet is allowed to fish close to the river after the scheduled three day closure. To date, the post August 5 escapement is less than 20,000. It is necessary to keep the fleet well away from the Bear River until many of the fish near the terminus move into the river and still allow a harvest on incoming fish.

Emergency Order No. 4-F-M-56-88

Effective Date: 10;00 P.M. August 15, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time until 12:00 P.M. August 31 in that portion of the Iliuliuk Bay and south channel to Iliuliuk Harbor enclosed by he latitude of the southern tip of Amaknok Island and the latitude of the eastern tip of Rocky Point. The closed waters of Inner Iliuliuk Harbor are reduced to include only those waters within 200 yards of the terminus of Iliuliuk River (also known as Unalaska Village Creek or Town Creek).

Nateekin Bay is open to commercial salmon fishing from 12:00 A.M. Noon August 15 until 10:00 P.M. August 18. The closed waters in Nateekin Bay is expanded to include the bay's entire northwest corner.

JUSTIFICATION:

The estimated escapement into Iliuliuk River is 21,000 pink salmon, the optimum level for this system. Extensive fishing time is needed to harvest the resource especially when the very light effort in the area is considered.

The Nateekin River pink salmon escapement is estimated at 56,000 with another 30,000 to 50,000 fish schooled in the northwest corner of the bay. A good pink salmon escapement can be achieved

in this system if the fish in the northwest corner of the bay are protected while allowing a harvest in the balance of the bay.

Emergency Order No. 4-F-M-57-88

Effective Date: 1:00 P.M. August 17, 1988

EXPLANATION:

This emergency order supersedes emergency order 4-F-M-55-88 and reopens the commercial salmon fishing season in that portion of the Bear River Section located between King Salmon River and the Bear River church.

JUSTIFICATION:

The post August 5 escapement of sockeye (excluding jacks) is 34,000 past Bear River weir through August 16. The minimum goal of 50,000 should easily be exceeded by September 1. The expanded closed area around the terminus of Bear River is no longer needed.

Emergency Order 4-F-M-58-88

Effective Date: 6:00 P.M. August 17, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 6:00 P.M. Friday during the week of August 14-20 in the Inner Port Heiden Section.

JUSTIFICATION:

Almost no fishing occurred during Monday and Tuesday of the current week in the Inner Port Heiden Section. A 48 hour extension will allow fishermen an opportunity to make up for fishing time lost to weather.

Emergency Order No. 4-F-M-59-88

Effective Date: 10:00 P.M. August 17, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 10:00 P.M. August 18 in the following locations:

Bechevin Bay Section
Unimak District
Ikatan Bay Section
Thin Point Section
Cold Bay Section
Belkofski Bay Section
Volcano Bay Section
General Sect. of the Southwestern Dist.
Pavlof Bay Section
Canoe Bay Section
Shumagin Islands Section

JUSTIFICATION:

Pink salmon escapements are generally good and catches during August 16 indicate that large numbers of fish are still moving into much of the area. A 24 hour extension of fishing time can be allowed in all of the South Peninsula presently open to fishing, except for the Cold Bay Section, without jeopardizing the resource. Cold Bay pink runs are weak.

Emergency Order No. 4-F-M-60-88

Effective Date: 10:00 P.M. August 18, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 47 hours until 9:00 P.M. August 20 in the Thin Point and Deer Island Sections.

JUSTIFICATION:

Pink salmon escapements in Thin Point and Deer Island Section streams are generally very good and substantial catches are still being taken from these sections. More fishing time can be allowed at this time without jeopardizing the resource in the Thin Point and Deer Island Sections. Escapements are still in question over most of the South Peninsula's balance.

Emergency Order No. 4-F-M-61-88

Effective Date: 9:00 P.M. August 20, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 9:00 P.M. August 22 in the Thin Point and Deer Island Sections.

JUSTIFICATION:

Pink salmon escapements in Thin Point and Deer Island Section streams are generally very good and substantial catches are still being taken from these sections. More fishing time can be allowed at this time without jeopardizing the resource in the Thin Point and Deer Island Sections. Escapements are still in question over most of the South Peninsula's balance.

Emergency Order No. 4-F-M-62-88

Effective Date: 6:00 P.M. August 21, 1988

EXPLANATION:

This emergency order expands fishing periods to 6:00 P./M. Sunday until 6:00 P.M. Friday during the week of August 21-27 and to 6:00 A.M. Monday until 6:00 P.M. Friday during subsequent weeks during the open season in the Three Hills, Bear River, and Herendeen-Moller Bay Sections.

The closed waters at Bear River are reduced to include only those waters upstream from the terminus of the ocean shoreline.

JUSTIFICATION:

The Bear River sockeye escapement through the weir has greatly increased during the past 36 hours. The post August 5 sockeye escapement (excluding jacks) is now 57,000, well over the season minimum goal of 50,000 and is rapidly approaching the high end (75,000) of the range. More fishing time and area is needed to harvest the resource.

Emergency Order No. 4-F-M-63-88

Effective Date: 6:00 A.M. August 22, 1988

EXPLANATION:

This emergency order reopens Nateekin Bay to commercial salmon fishing from 6:00 A.M. August 22 until 6:00 P.M. August 26. The extended closed waters in Nateekin Bay established by emergency order 4-F-M-56-88 is reduced back to only 500 yards from the stream terminus.

JUSTIFICATION:

A recent survey of the Nateekin River indicates that the pink salmon escapement is 110,000, within the 100,000 to 150,000 peak escapement goal. More fishing time and area is needed to harvest the resource.

Emergency Order No. 4-F-M-64-88

Effective Date: 6:00 A.M. September 3, 1988

EXPLANATION:

This emergency order allows a 6:00 A.M. September 3, until 9:00 P.M. September 6 commercial salmon fishing period in the Southwestern District. A 6:00 A.M. September 3 until 9:00 P.M.

September 11 fishing period is established for the South Central, Southwestern, Unimak and Northwestern Districts.

The closed waters at Thin Point Lagoon are reduced to include only the lagoon and those waters within 750 yards of the lagoon terminus.

JUSTIFICATION:

Fishing time is needed to harvest coho salmon along the South Peninsula and in the Northwestern District. Fishing effort is anticipated to be much greater in the Southeastern District than in the other districts.

Emergency Order No. 4-F-M-65-88

Effective Date: 6:00 P.M. August 23, 1988

EXPLANATION:

This emergency order extends weekly fishing periods three hours until 9:00 P.M. Wednesday each week in the Ilnik, Inner Port Heiden, and Outer Port Heiden Sections.

JUSTIFICATION:

Coho runs at Ilnik and Port Heiden appear strong. A three hour extension will give fishermen in the bays an opportunity to fish three full days. Previous to 1988, fishing was allowed four days per week. The Cinder River fishery is much more effective in blocking the run off than is the case at Port Heiden and Ilnik even though the Cinder River coho runs appear strong.

Emergency Order No. 4-F-M-66-88

Effective Date: 12:00 Noon, August 26, 1988

EXPLANATION:

This emergency order allows a 6 hour commercial salmon fishery in King Cove Bay, beginning at noon August 26.

JUSTIFICATION:

There are approximately 200,000 pink salmon in excess of Ram's Creek escapement needs milling in front of the town of King Cove. A six hour fishing period will enable fishermen to catch this surplus. Escapement needs should be met by the fish presently in the creek plus those at the terminus.

Emergency Order No. 4-F-M-67-88

Effective Date: 9:00 P.M. September 1, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing time 21 hours until 6:00 P.M. Thursday during the week of August 28-September 3, in the Ilnik Section.

JUSTIFICATION:

Due to strong winds, little fishing occurred during August 29 in the Ilnik Section. Coho runs appear strong and additional fishing time can be allowed to make up for time lost due to weather.

Emergency Order No. 4-F-M-68-88

Effective Date: September 2, 1988

EXPLANATION:

This emergency order allows continuous commercial salmon fishing for the balance of the 1988 season in the Bear River and Three Hills Sections and that portion on the Herendeen-Moller Bay section enclosed by a line from Harbor Point to Entrance Point.

JUSTIFICATION:

The Bear River post August 5 escapement of sockeye through the weir is 83,000, well above the maximum goal of 75,000. Indications are that a large number of sockeye are in the river below the weir. Fishing effort is light and weather likely will prevent fishing during much of September. More fishing time is needed to harvest the resource.

Emergency Order No. 4-F-M-69-88

Effective Date: September 2, 1988

EXPLANATION:

This emergency order allows continuous commercial salmon fishing time during the open season in that portion of the Aleutian Islands Area located outside a 10 mile radius of Unalaska, Akutan, Nikolski, and Atka.

JUSTIFICATION:

Pink salmon should be well within closed waters in the Aleutian Islands Area at this time. Fishing time is needed to allow fishermen to harvest coho salmon. Effort level is expected to be very light, if there is any fishing effort at all. The area within a 10 mile radius of Atka, Nikolski, Unalaska, and Akutan should protect subsistence salmon needs for those communities.

Emergency Order No. 4-F-M-70-88

Effective Date: 6:00 P.M. September 7, 1988

EXPLANATION:

This emergency order expands fishing periods by 45 hours until 6:00 P.M. Friday each week in the Inner Port Heiden, Outer Port Heiden, and Ilnik Sections.

JUSTIFICATION:

The Meshik River coho escapement is estimated to be over 20,000 and is nearing the desired escapement level of 30,000. The Unangashik River coho escapement is estimated at 6,000 plus, which should be good for this system of limited spawning area. The Ilnik Lagoon coho escapement in clear water is estimated at 4,000 with good sign of fish in muddy water. Fishing effort is light at Ilnik. More fishing time can be allowed at this time while still obtaining good escapements.

Emergency Order No. 4-F-M-71-88

Effective Date: 6:00 A.M. September 9, 1988

EXPLANATION:

This emergency order allows a 6:00 A.M. September 9 until 9:00 P.M. September 13 commercial salmon fishing period in the Southeastern District.

JUSTIFICATION:

Coho catches by set gill nets are averaging over 100 fish per day by permit holder, which indicates strong coho runs in this area. Fishing time is needed to allow for another harvest. Traditionally weather is bad and effort drops off as September progresses.

Emergency Order No. 4-F-M-72-88

Effective Date: 9:00 P.M. September 11, 1988

EXPLANATION:

This emergency order extends commercial salmon fishing 72 hours until 9:00 P.M. September 14 in the following locations:

(1) that portion of the Southwestern District located west of the longitude of Belkofski Point.

(2) Unimak District

(3) Urilia Bay Section

(4) Izembek-Moffet Bay Section

JUSTIFICATION:

Coho runs are strong along the western portion of the Alaska Peninsula Area's south side and in the Urilia Bay and Izembek-Moffet Bay Sections. No fishing took place in these areas during September 7-9 due to the lack of market. More fishing time is justified to make up for that lost in the above areas.

Emergency Order No. 4-F-M-73

Effective Date: 9:00 P.M. September 13, 1988

EXPLANATION:

This emergency order allows continuous commercial salmon fishing during the balance of the open season in the Southeastern District.

JUSTIFICATION:

Weather continues to plague fishing in the Southeastern District and the effort has dropped to less than 15 set gill net permits. Catches of coho salmon indicate substantial runs for this district and weather during September has greatly limited fishing effort in the past. The amount of time which tender service by buyers will remain available to fishermen is limited. More fishing time can be allowed at this time without jeopardizing the resource.

Emergency Order No. 4-F-M-74-88

Effective Date: October 7, 1988

EXPLANATION:

This emergency order reopens the commercial salmon season during October 7 through October 31 in the Southeastern District.

JUSTIFICATION:

Coho escapements in those major Southeastern District streams surveyed are healthy. The effort level is anticipated to be only 2-3 set gillnetters. The season can be reopened at this time without jeopardizing the resource.

GAME OBSERVATIONS

The willow ptarmigan population was reported to be at a very high level in the vicinity of Port Moller and Nelson Lagoon but appeared to be the lowest in at least 10 years at Cold Bay.

The emperor goose population appears to be recovering but still isn't high enough for hunting to be allowed.

Wolves are abundant along the lower Alaska Peninsula and on Unimak Island.

The Unimak Island caribou population continues to appear very small and the status of the Lower Alaska Peninsula caribou herd is in question. Calf survival seems to be poor. The reason(s) for the poor survival is not known. The Upper Peninsula herd seems to be healthy.

A Popof Island bison survey was made by the Commercial Fish Division for the Game Division on August 24. A total of 99 animals were spotted, of which 8 were calves of the year.

Moose are occasionally seen west of Port Moller but the population doesn't appear to be increasing at a rapid rate on the lower Alaska Peninsula. The moose population on the upper Alaska Peninsula appears stable.

MISCELLANEOUS ACTIVITY OR OBSERVATIONS

Due to concern by the public over hatchery produced chum salmon impacting the 500,000 South Unimak-Shumagin Islands June chum ceiling, FRED Division did not take chum eggs at Russel Creek Hatchery during 1988. FRED instead took about 2 million sockeye eggs from Mortensen Lagoon fish and about 2 million pinks eggs from Russel Creek where pinks were not easily available due to a poor escapement. Enough chums were present that over 50 million chum eggs could have been taken. A plan with long term objectives is presently being drafted. Russel Creek Hatchery has been plagued by design problems (now solved), lack of funds, and instable planning since its completion in 1979.

King Cove felt numerous earthquakes during the summer and it was feared that Mount Dutton "may be coming to life". Only one quake was felt in Cold Bay which is about 7-8 miles farther from Dutton than King Cove. Seismologists were studying the situation.

In the vicinity of Cold Bay, the blueberry and salmonberry crops were very poor. Crowberries were spotty, being very abundant is come locations. Wild strawberries were very abundant.

The American bottomfish processing capacity has continued to increase, primarily through the addition of more factory trawlers, to the point where the joint ventures (JV's) are being completely replaced.

Fishing for Pacific cod continues to provide work for the communities of Sand Point and King Cove. Several of the local boats have been converted to trawlers.

The Dutch Harbor airport was surfaced and the Cold Bay airport was resurfaced.

Reeve Aleutian Airways has discontinued service to Dutch Harbor/Unalaska. This makes it extremely difficult to travel

from the Alaska Peninsula to Dutch Harbor. A round trip ticket from Cold Bay to Dutch Harbor now cost roughly $1,400 and requires two overnights in Anchorage! It is somewhat cheaper and more convenient to charter a Navajo from Cold Bay to Dutch Harbor. A round trip seat fare between Sand Point and all the other Alaska Peninsula Area communities (except Port Heiden) also requires two overnights in Anchorage, although the fare is the same as if directly between Sand Point and another local community (due to the fact only one airline is required).

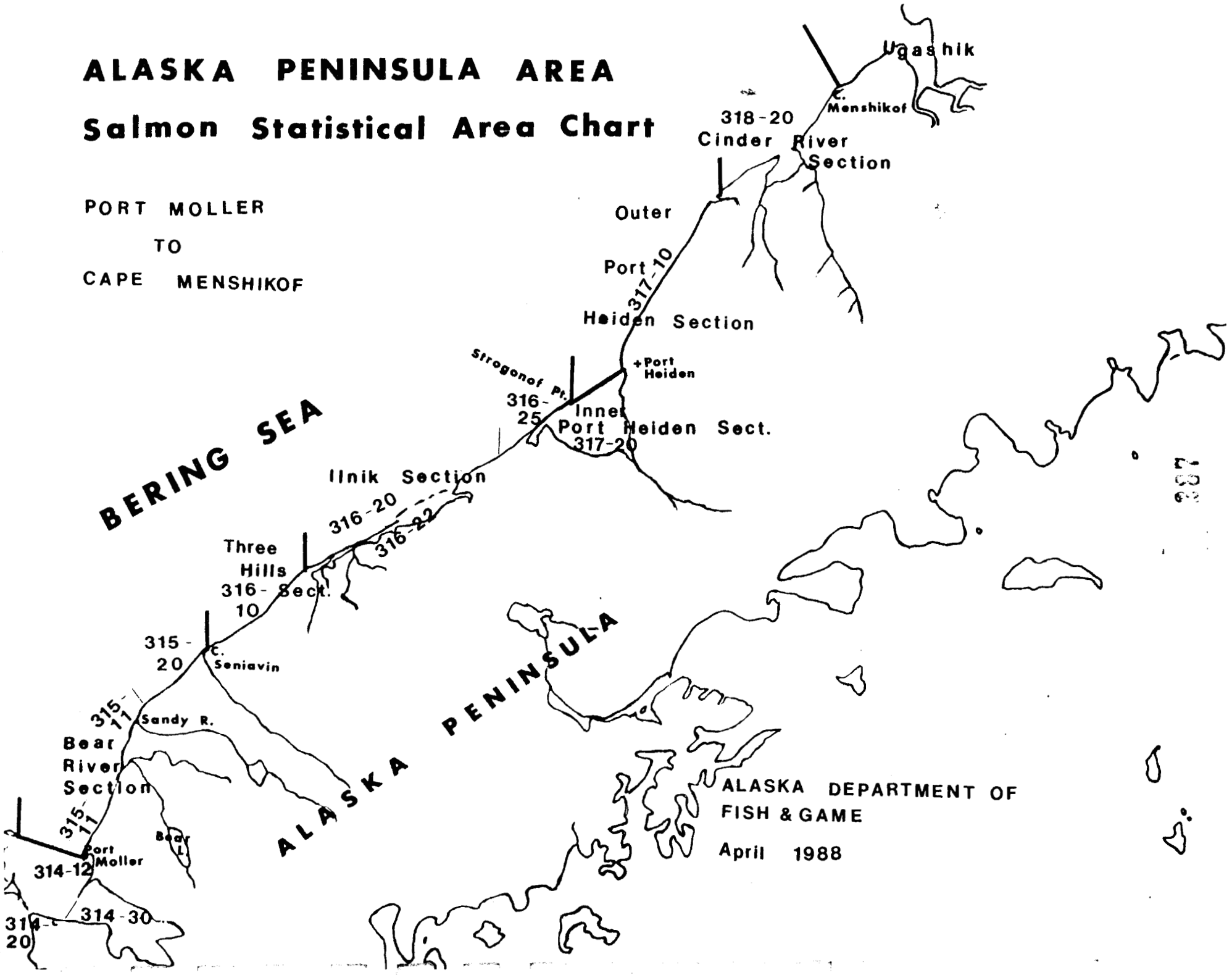
ALASKA PENINSULA AREA

Salmon Statistical Area Chart

PORT MOLLER

TO

CAPE MENSHIKOF



ALASKA DEPARTMENT OF FISH & GAME

April 1988

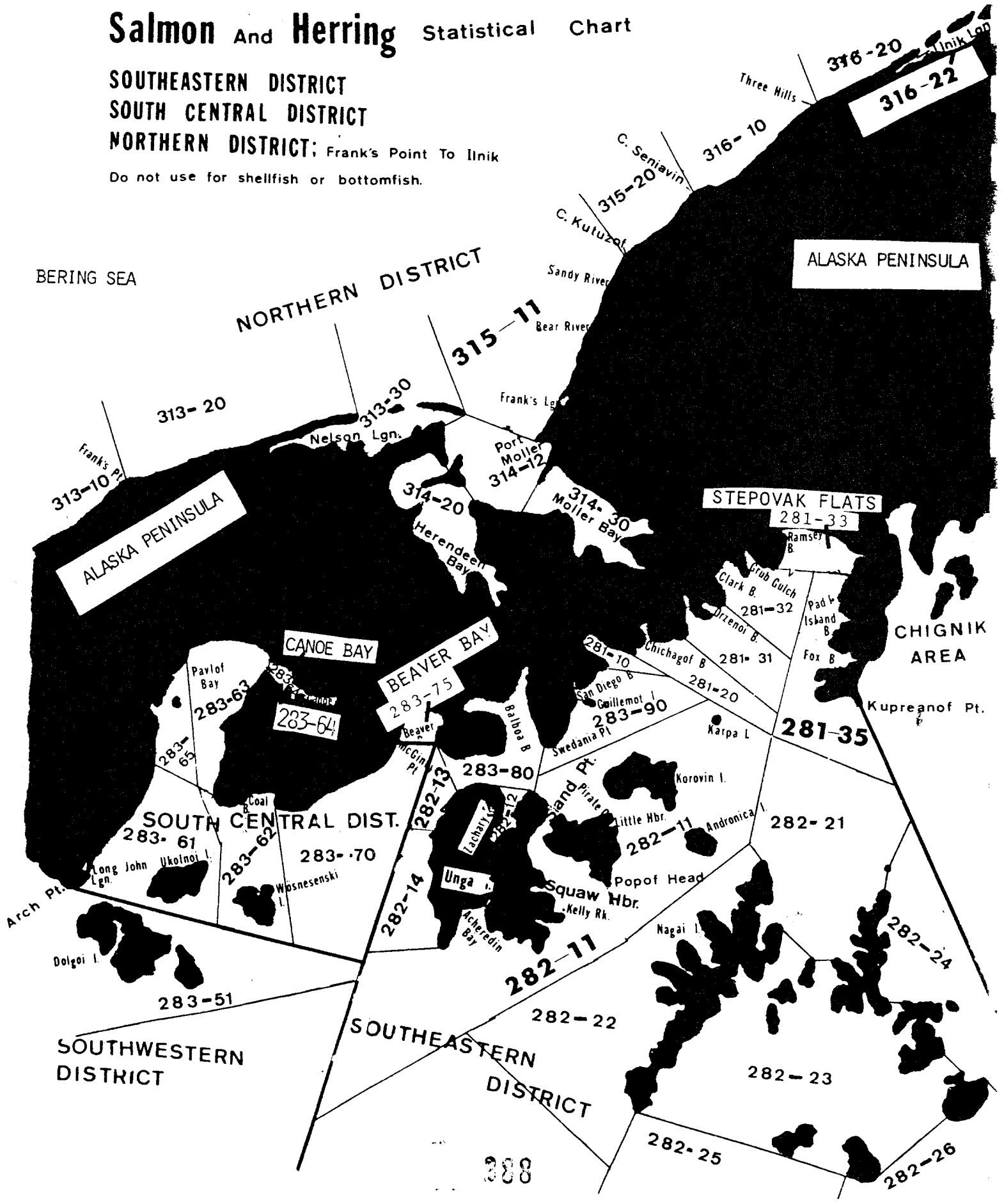
ALASKA PENINSULA AREA

Salmon And Herring Statistical Chart

ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1986

SOUTHEASTERN DISTRICT
SOUTH CENTRAL DISTRICT
NORTHERN DISTRICT: Frank's Point To Ilnik

Do not use for shellfish or bottomfish.



ALASKA PENINSULA AREA

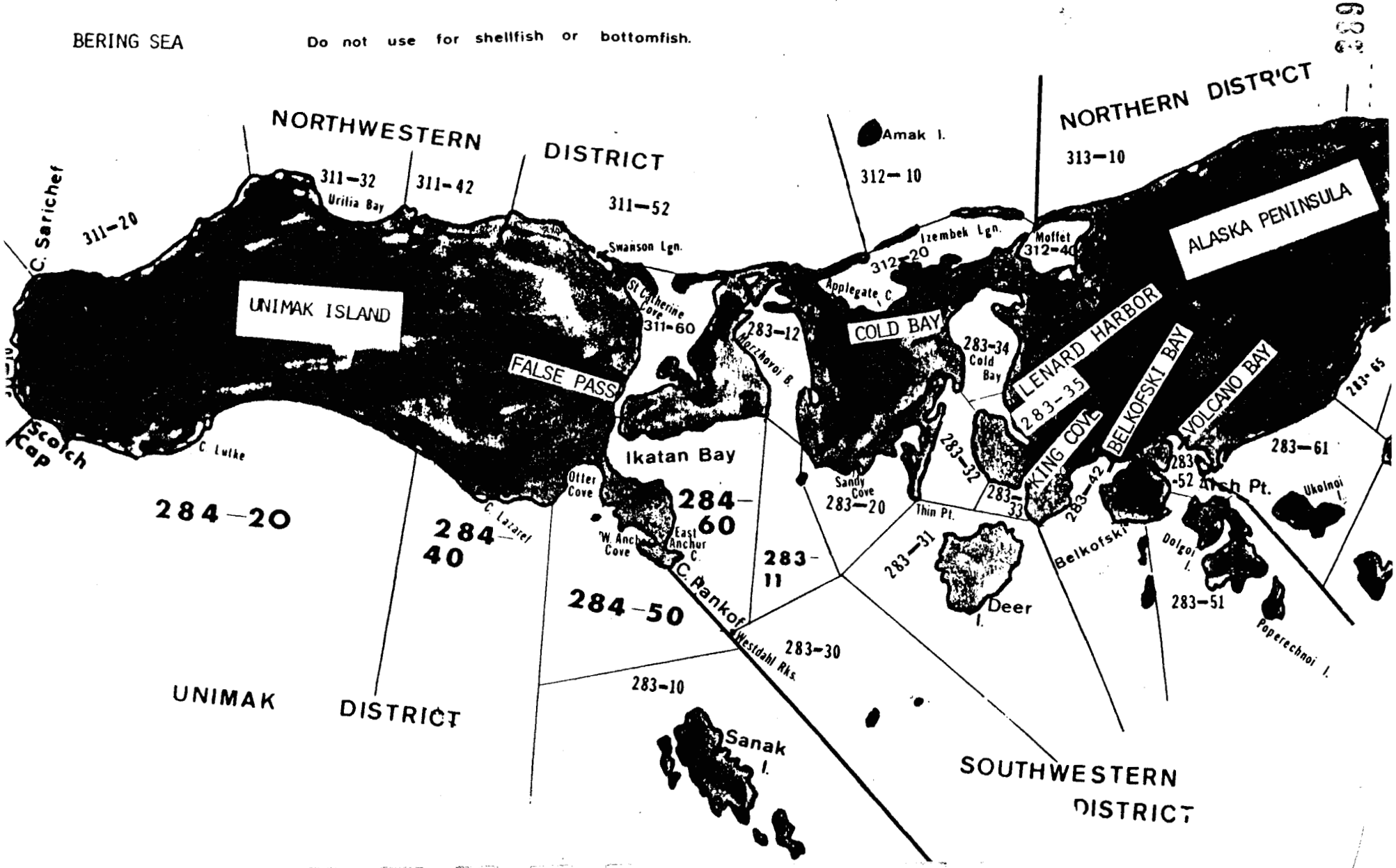
Salmon And Herring Statistical Chart

ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1986

NORTWESTERN, UNIMAK, And SOUTHWESTERN DISTRICTS

BERING SEA

Do not use for shellfish or bottomfish.

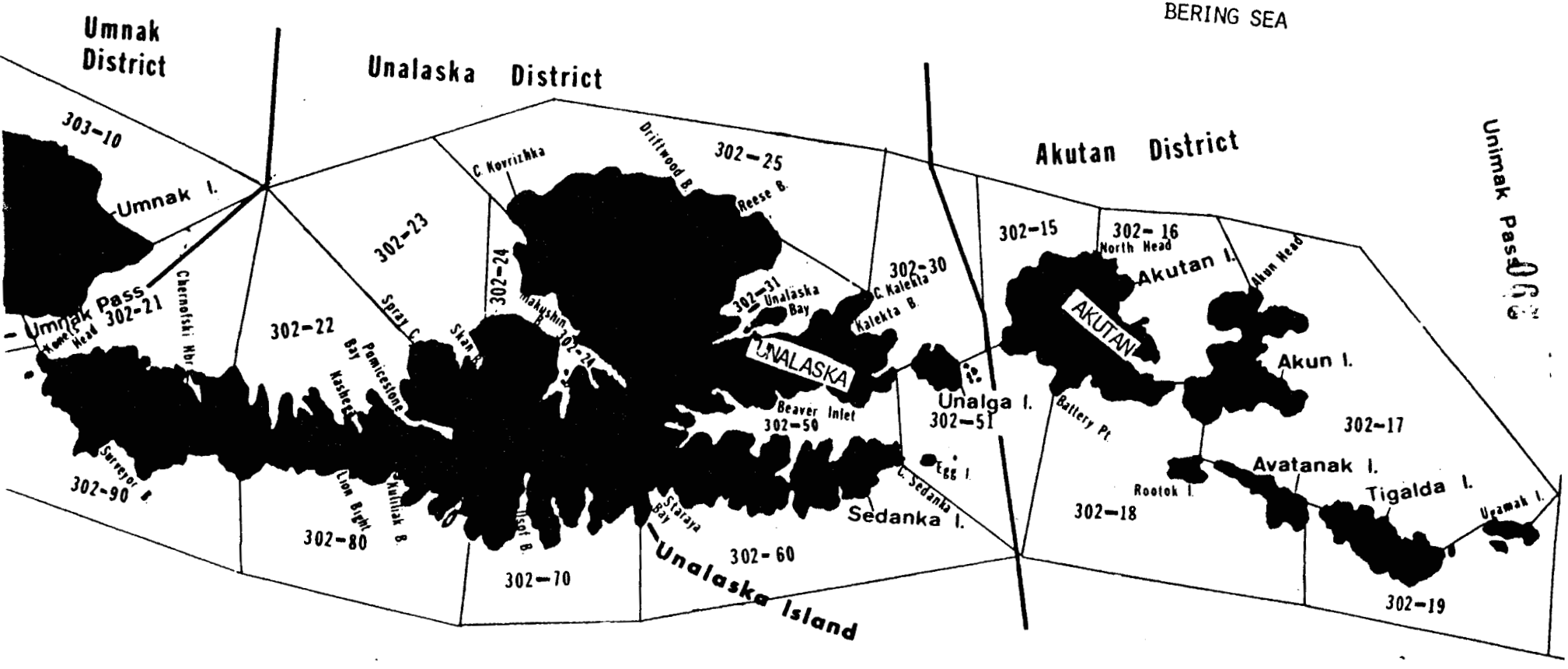


ALEUTIAN ISLANDS AREA

UNALASKA AND AKUTAN DISTRICTS

Statistical Chart For SALMON And HERRING

Do not use for shellfish or bottomfish.



ALASKA DEPARTMENT OF FISH AND GAME
APRIL 1979

KODIAK DISTRICT CORRECTION TABLE (1)

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
KODIAK AND AFOGNAK ISLANDS				
Andreon B., Shuyak Is	+0 39	+0 48	+2 8	+0 4
Perenosa Bay	+0 32	+0 47	+2 8	+0 4
Seal Bay	+0 33	+0 39	+2 7	+0 4
Tonki Bay	+0 16	+0 24	+2 6	+0 3
Marmot Is., Marmot St	+0 22	+0 10	+1 2	+0 1
Uzhut Bay	+0 16	+0 24	+0 4	+0 1
Kazakof B., Marmot B	+0 08	+0 [illegible]	+0 9	+0 3
Fox Bay, Whale I	+0 27	+0 40	+1 5	+0 3
Kizhuyak Bay	+0 10	+0 14	+1 1	+0 1
Kizhuyak Point	+0 08	+0 22	+0 9	+0 2
Ouzinkie, Spruce Is	0 01	0 01	+0 5	+0 1
Spruce Is. [illegible] side	+0 06	+0 11	+0 [illegible]	+0 2
Kodiak Harbor	Kodiak Schedule			
St. Paul Harbor	0 07	0 03	+0 2	+0 1
Womens Bay	+0 04	-0 01	+0 3	+0 1
Ugak B. (Saltery Cove)	0 25	0 17	0 0	0 0
Port Hobron				
Sitkalidak Island	0 14	0 03	0 0	+0 2
Three Saints Bay	0 18	0 10	+0 1	+0 2
Jap Bay	0 13	0 06	0 0	[illegible]
Sitkinak Lagoon	0 16	+0 10	[illegible]	+0 3
Lazy Bay, Alitak Bay	[illegible]	[illegible]	*1 41	*1 41
Moser B., Trap Pt	[illegible]	0 32	*[illegible] 19	*[illegible]
Olga Bay (cannery)	1 48	+4 16	*0 14	*0 14
ALASKA PENINSULA				
Kanatak Lagoon, Pt. B	+0 25	+0 54	+3 3	+0 4
[illegible], Wide B	+0 25	+0 35	+3 5	+0 3
Anchorage Bay	+0 23	+0 43	+2 5	+0 4
Three Star Point	+0 32	+0 40	*0 93	*0 93
Chiachi Is. (east side)	[illegible]	+0 40	*0 92	*0 92
Kupreanof Harbor				
Paul Island	+0 23	+0 38	*0 92	*0 92
Fox B., Kupreanof P	+0 22	+0 36	*0 89	*0 89
Dent Pt., Stepovak Bay	-0 21	+0 36	*0 89	*0 89
SHUMAGIN ISLANDS				
Korovin I. (east side)	[illegible]	[illegible]	*0 92	*0 [illegible]
Sanborn H., Nagai I	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] H., Nagai I	[illegible]	[illegible]	*[illegible] 83	[illegible]
Pirate Cove, [illegible]	[illegible]	[illegible] 41	[illegible]	[illegible]
Sand Point, [illegible]	[illegible]	[illegible]	[illegible] 87	[illegible] 87
Zachary Bay, Unga I	[illegible] 14	[illegible]	*0 86	*0 86
Albatross A., Balboa B	[illegible]	+0 43	[illegible]	*0 91
Beaver Bay	[illegible]	[illegible]	*0 87	*0 87
Seal Cape, Coal Bay	[illegible] 34	0 31	*0 84	*0 84
Ukolnoi Island	+0 41	+0 40	*0 81	*0 83
Dolgoi H., Dolgoi Is	+0 44	[illegible]	*0 79	[illegible]
Settlement Pt., Pavlof B	[illegible]	+0 48	*0 84	*0 84
Canoe Bay, Pavlof B	[illegible] 36	[illegible] 30	*0 76	[illegible]
King Cove	[illegible]	[illegible]	*0 80	[illegible]
Lenard Harbor, Cold B	+0 46	+0 57	*0 85	*0 8[illegible]
Cold Bay	+0 40	+1 03	*0 84	*0 84
Morzhovoi Bay	+0 56	+0 43	*0 80	*0 80

*Multiply by this ratio

KODIAK DISTRICT CORRECTION TABLE (2)

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
ALASKA PENINSULA, Continued				
SANAK ISLANDS				
Peterson Bay	+0 29	+0 32	[illegible]	[illegible]
Sanak Harbor	+0 48	+0 47	*0 78	*0 78
ALEUTIAN ISLANDS				
UNIMAK ISLAND				
Dora Harbor	+0 49	[illegible]	*0 [illegible]	*0 [illegible]
Ikatan Bay	+0 43	+0 45	*0 78	[illegible]
BERING SEA				
ST LAWRENCE ISLAND				
[illegible] River [illegible]	[illegible]	[illegible]	*0 20	[illegible]
[illegible] Point	[illegible]	[illegible]	[illegible] 28	[illegible] 28
[illegible] Lagoon Ent	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] B., Nunivak	5 00	4 33	*0 51	*0 51
[illegible] Bay	[illegible]	[illegible] 28	*0 27	[illegible]
Cape Romanzof	[illegible] 24	[illegible]	*0 80	*0 80
Black, Black River	[illegible]	[illegible]	*0 59	*0 59
NORTON SOUND				
[illegible] Pass, [illegible]	[illegible] 47	[illegible] 24	*0 20	*0 30
Kawanak Pass, [illegible]	[illegible]	[illegible]	*0 2[illegible]	*0 2[illegible]
ARCTIC OCEAN				
[illegible], Kotzebue [illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Island	[illegible]	[illegible]	[illegible]	[illegible]
[illegible] Ma [illegible]	[illegible]	[illegible]		
[illegible] Ma [illegible]	[illegible]	[illegible]		

*Multiply by this ratio
Along the Arctic coast of Alaska east [illegible] Cape [illegible] the mean range is about [illegible] foot

MEMORANDA

The following height ratios should be used primarily to calculate only the higher high and lower low waters. These listings were done for convenience purposes only and do not constitute any endorsement of the use of such figures by the NOS or Elliott Sales

	TIME HIGH	TIME LOW	FEET HIGH	FEET LOW
False Pass	+2 48	+2 23	*0 48	*0 48
Akutan Harbor	+4 18	+4 41	*0 46	*0 46
Dutch Harbor	+4 35	+4 41	*0 44	*0 44
Cape Sagak	+1 32	+1 32	*0 58	*0 58
Finch Cove	0 00	+5 11	*0 38	*0 38
Alka Pass E. End	-0 07	+2 54	*0 54	*0 54
Sweeper Cove	+1 00	+5 04	*0 44	*0 44

*Multiply Kodiak tides by this ratio

HIGH Tides KODIAK District
APRIL 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	Fri	●	1:17	8.1	1:33	7.9
2	Sat	●	1:41	8.5	2:08	7.8
DAYLIGHT TIME STARTS 2 A.M.						
3	SUN	●	3:07	8.8	3:44	7.6
4	Mon	●	3:31	9.0	4:20	7.2
5	Tues	•	4:00	9.0	4:59	6.7
6	Wed	•	4:31	8.9	5:45	6.2
7	Thur	•	5:07	8.7	6:37	5.6
8	Fri	•	5:51	8.4	7:51	5.2
9	Sat	•	6:54	8.0	9:22	5.3
10	SUN	•	8:16	7.6	10:41	5.8
11	Mon	•	9:52	7.5	11:37	6.6
12	Tues	•	11:14	7.8	....	...
13	Wed	•	0:19	7.6	12:21	8.1
14	Thur	•	0:58	8.5	1:17	8.4
15	Fri	•	1:36	9.3	2:10	8.5
16	Sat	●	2:12	9.9	2:59	8.3
17	SUN	●	2:50	10.2	3:45	8.0
18	Mon	●	3:26	10.1	4:31	7.5
19	Tues	●	4:03	9.8	5:18	6.9
20	Wed	●	4:42	9.3	6:09	6.3
21	Thur	●	5:23	8.6	7:07	5.7
22	Fri	●	6:08	7.8	8:20	5.4
23	Sat	●	7:07	7.1	9:36	5.5
24	SUN	●	8:26	6.5	10:45	5.8
25	Mon	●	9:52	6.3	11:27	6.3
26	Tues	●	11:05	6.4	....	...
27	Wed	●	0:02	6.9	12:02	6.6
28	Thur	●	0:31	7.5	12:50	6.8
29	Fri	●	1:00	8.0	1:33	7.0
30	Sat	●	1:29	8.5	2:13	7.1

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides KODIAK District
APRIL 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	Fri	●	7:24	0.4	7:31	0.6
2	Sat	●	7:57	-0.1	7:59	0.8
DAYLIGHT TIME STARTS 2 A.M.						
3	SUN	●	9:30	-0.5	9:25	1.1
4	Mon	●	10:04	-0.7	9:53	1.6
5	Tues	•	10:40	-0.7	10:18	2.0
6	Wed	•	11:21	-0.5	10:54	2.5
7	Thur	•	12:12 PM	-0.2	11:32	3.0
8	Fri	•	....	...	1:12	0.1
9	Sat	•	0:24	3.5	2:26	0.4
10	SUN	•	1:52	3.8	3:43	0.4
11	Mon	•	3:41	3.5	4:53	0.2
12	Tues	•	5:07	2.6	5:51	0.0
13	Wed	•	6:14	1.4	6:36	-0.2
14	Thur	•	7:07	0.1	7:19	0.0
15	Fri	•	7:54	-1.0	8:00	0.2
16	Sat	●	8:40	-1.7	8:39	0.6
17	SUN	●	9:25	-2.0	9:15	1.1
18	Mon	●	10:08	-2.0	9:53	1.7
19	Tues	●	10:52	-1.6	10:30	2.3
20	Wed	●	11:36	-1.0	11:11	2.9
21	Thur	●	12:27 PM	-0.2	11:56	3.4
22	Fri	●	....	...	1:26	0.5
23	Sat	●	0:54	3.8	2:31	1.0
24	SUN	●	2:18	4.0	3:41	1.3
25	Mon	●	3:56	3.8	4:41	1.4
26	Tues	●	5:09	3.1	5:28	1.4
27	Wed	●	6:03	2.3	6:07	1.4
28	Thur	●	6:45	1.4	6:42	1.4
29	Fri	●	7:24	0.5	7:13	1.5
30	Sat	●	7:59	-0.2	7:48	1.6

STANDARD TIME THRU APRIL 2

HIGH Tides KODIAK District
MAY 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	SUN	●	1:56	8.9	2:52	7.1
2	Mon	●	2:25	9.2	3:32	7.1
3	Tues	•	2:57	9.4	4:14	6.9
4	Wed	•	3:33	9.4	4:57	6.6
5	Thur	•	4:10	9.3	5:48	6.3
6	Fri	•	4:54	9.0	6:45	6.0
7	Sat	•	5:45	8.5	7:51	6.0
8	SUN	•	6:49	7.9	8:57	6.3
9	Mon	•	8:11	7.3	9:59	6.8
10	Tues	•	9:37	7.0	10:50	7.6
11	Wed	•	11:00	6.9	11:36	8.4
12	Thur	•	....	...	12:10	7.0
13	Fri	●	0:19	9.1	1:09	7.2
14	Sat	●	1:01	9.7	2:03	7.3
15	SUN	●	1:40	10.0	2:51	7.3
16	Mon	●	2:19	10.1	3:39	7.2
17	Tues	●	2:58	9.9	4:25	6.9
18	Wed	●	3:37	9.6	5:11	6.7
19	Thur	●	4:18	9.1	5:58	6.4
20	Fri	●	4:57	8.5	6:48	6.1
21	Sat	●	5:43	7.8	7:39	6.0
22	SUN	●	6:33	7.1	8:33	6.1
23	Mon	●	7:34	6.4	9:25	6.3
24	Tues	●	8:50	5.9	10:11	6.7
25	Wed	●	10:09	5.7	10:53	7.2
26	Thur	●	11:18	5.7	11:28	7.7
27	Fri	●	....	...	12:20	5.8
28	Sat	●	0:07	8.3	1:11	6.1
29	SUN	•	0:39	8.8	1:59	6.3
30	Mon	•	1:17	9.2	2:42	6.5
31	Tues	•	1:54	9.5	3:27	6.7

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides KODIAK District
MAY 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	SUN	●	8:35	-0.8	8:17	1.8
2	Mon	●	9:11	-1.2	8:52	2.0
3	Tues	•	9:49	-1.4	9:24	2.3
4	Wed	•	10:28	-1.4	10:03	2.6
5	Thur	•	11:13	-1.3	10:42	2.9
6	Fri	•	12:06 PM	-0.9	11:37	3.2
7	Sat	•	....	...	1:02	-0.5
8	SUN	•	0:43	3.4	2:02	-0.1
9	Mon	•	2:10	3.3	3:08	0.3
10	Tues	•	3:41	2.7	4:09	0.6
11	Wed	•	4:58	1.7	5:05	0.7
12	Thur	•	6:02	0.5	5:54	1.1
13	Fri	●	6:54	-0.5	6:44	1.3
14	Sat	●	7:43	-1.4	7:25	1.6
15	SUN	●	8:28	-1.9	8:07	1.9
16	Mon	●	9:11	-2.1	8:49	2.2
17	Tues	●	9:53	-2.0	9:29	2.5
18	Wed	●	10:35	-1.6	10:10	2.8
19	Thur	●	11:19	-1.1	10:52	3.1
20	Fri	●	12:03 PM	-0.5	11:40	3.4
21	Sat	●	....	...	12:49	0.1
22	SUN	●	0:37	3.6	1:39	0.7
23	Mon	●	1:47	3.7	2:28	1.2
24	Tues	●	3:07	3.4	3:19	1.6
25	Wed	●	4:21	2.8	4:08	1.9
26	Thur	●	5:21	2.0	4:53	2.1
27	Fri	●	6:10	1.1	5:38	2.3
28	Sat	●	6:53	0.3	6:20	2.4
29	SUN	•	7:35	-0.5	7:03	2.5
30	Mon	•	8:13	-1.2	7:45	2.6
31	Tues	•	8:55	-1.7	8:23	2.6

ALASKA DAYLIGHT TIME

HIGH Tides KODIAK District
JUNE 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	Wed	•	2:36	9.8	4:10	6.7
2	Thur	•	3:18	9.9	4:55	6.7
3	Fri	•	4:03	9.7	5:41	6.7
4	Sat	•	4:49	9.3	6:33	6.8
5	SUN	•	5:44	8.7	7:25	7.0
6	Mon	•	6:46	7.8	8:19	7.4
7	Tues	•	7:59	7.0	9:12	7.8
8	Wed	•	9:22	6.3	10:05	8.3
9	Thur	●	10:46	6.0	10:54	8.8
10	Fri	●	NOON	6.0	11:44	9.2
11	Sat	●	....	...	1:05	6.2
12	SUN	●	0:30	9.5	2:00	6.4
13	Mon	●	1:16	9.7	2:49	6.6
14	Tues	●	1:58	9.7	3:35	6.7
15	Wed	●	2:41	9.6	4:17	6.7
16	Thur	●	3:21	9.4	4:55	6.7
17	Fri	●	4:00	9.0	5:37	6.6
18	Sat	●	4:39	8.5	6:13	6.6
19	SUN	●	5:20	7.9	6:51	6.7
20	Mon	●	6:02	7.2	7:33	6.7
21	Tues	●	6:51	6.4	8:11	6.9
22	Wed	●	7:51	5.7	8:54	7.2
23	Thur	●	9:07	5.2	9:39	7.5
24	Fri	●	10:29	5.0	10:24	7.8
25	Sat	●	11:46	5.1	11:12	8.3
26	SUN	•	12:48 PM	5.4	11:58	8.8
27	Mon	•	....	...	1:45	5.8
28	Tues	•	0:47	9.3	2:30	6.2
29	Wed	•	1:35	9.8	3:15	6.6
30	Thur	•	2:20	10.1	3:56	6.9

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides KODIAK District
JUNE 1988

DATE	DAY	DOTS GUIDE	AM TIME	AM FT	PM TIME	PM FT
1	Wed	•	9:37	-2.0	9:09	2.7
2	Thur	•	10:20	-2.0	9:54	2.7
3	Fri	•	11:05	-1.9	10:43	2.8
4	Sat	•	11:53	-1.5	11:42	2.8
5	SUN	•	....	...	12:41	-1.0
6	Mon	•	0:51	2.7	1:31	-0.3
7	Tues	•	2:09	2.4	2:25	0.4
8	Wed	•	3:27	1.8	3:21	1.0
9	Thur	●	4:41	1.0	4:16	1.7
10	Fri	●	5:46	0.1	5:15	2.2
11	Sat	●	6:44	-0.7	6:07	2.5
12	SUN	●	7:35	-1.3	6:59	2.6
13	Mon	●	8:20	-1.7	7:48	2.7
14	Tues	●	9:02	-1.8	8:33	2.8
15	Wed	●	9:41	-1.7	9:15	2.8
16	Thur	●	10:21	-1.5	9:55	2.9
17	Fri	●	11:00	-1.2	10:39	3.0
18	Sat	●	11:36	-0.7	11:23	3.1
19	SUN	●	....	...	12:11	-0.2
20	Mon	●	0:12	3.1	12:46	0.4
21	Tues	●	1:10	3.0	1:23	1.0
22	Wed	●	2:11	2.9	2:02	1.6
23	Thur	●	3:23	2.4	2:48	2.2
24	Fri	●	4:29	1.8	3:37	2.7
25	Sat	●	5:31	1.1	4:32	3.0
26	SUN	●	6:23	0.2	5:31	3.1
27	Mon	•	7:12	-0.6	6:24	3.1
28	Tues	•	7:57	-1.3	7:19	2.9
29	Wed	•	8:40	-1.9	8:09	2.7
30	Thur	•	9:25	-2.3	8:57	2.4

ALASKA DAYLIGHT TIME

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HIGH Tides KODIAK District

JULY 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Fri	3:09	10.2	4:39	7.2
2	Sat	3:55	10.0	5:21	7.6
3	SUN	4:46	9.5	6:04	7.8
4	Mon	5:39	8.7	6:49	8.1
5	Tues	6:38	7.6	7:34	8.3
6	Wed	7:44	6.6	8:27	8.5
7	Thur	9:06	5.7	9:22	8.6
8	Fri	10:37	5.3	10:19	8.8
9	Sat	NOON	5.3	11:16	8.9
10	SUN	....	....	1:08	5.6
11	Mon	0:11	9.0	2:01	6.0
12	Tues	1:03	9.2	2:46	6.3
13	Wed	1:48	9.3	3:22	6.6
14	Thur	2:30	9.3	3:57	6.8
15	Fri	3:09	9.2	4:30	7.0
16	Sat	3:45	8.9	5:02	7.1
17	SUN	4:20	8.5	5:30	7.2
18	Mon	4:55	7.9	6:01	7.3
19	Tues	5:33	7.2	6:30	7.4
20	Wed	6:12	6.4	7:04	7.4
21	Thur	7:04	5.7	7:41	7.5
22	Fri	8:10	5.0	8:27	7.6
23	Sat	9:41	4.6	9:23	7.8
24	SUN	11:24	4.6	10:27	8.1
25	Mon	12:37△	5.1	11:30	8.6
26	Tues	....	....	1:29	5.7
27	Wed	0:28	9.3	2:14	6.3
28	Thur	1:21	9.9	2:53	6.9
29	Fri	2:12	10.3	3:29	7.5
30	Sat	3:00	10.4	4:08	8.1
31	SUN	3:49	10.1	4:46	8.5

● BIGGER THE DOT – BETTER THE FISHING

LOW Tides KODIAK District

JULY 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Fri	10:07	-2.4	9:49	2.1
2	Sat	10:49	-2.2	10:43	1.9
3	SUN	11:31	-1.7	11:39	1.8
4	Mon	....	....	12:14	-1.0
5	Tues	0:41	1.6	12:57	-0.1
6	Wed	1:51	1.4	1:42	0.9
7	Thur	3:06	1.1	2:34	1.8
8	Fri	4:22	0.6	3:33	2.6
9	Sat	5:35	0.1	4:39	3.1
10	SUN	6:34	-0.5	5:46	3.2
11	Mon	7:26	-0.9	6:47	3.2
12	Tues	8:12	-1.2	7:37	3.0
13	Wed	8:52	-1.4	8:22	2.7
14	Thur	9:27	-1.4	9:04	2.6
15	Fri	9:59	-1.3	9:43	2.5
16	Sat	10:30	-1.1	10:20	2.3
17	SUN	11:01	-0.7	11:02	2.3
18	Mon	11:27	-0.1	11:44	2.2
19	Tues	11:58	0.5	....	....
20	Wed	0:29	2.2	12:25	1.1
21	Thur	1:20	2.1	12:57	1.8
22	Fri	2:24	2.0	1:35	2.4
23	Sat	3:36	1.7	2:27	3.0
24	SUN	4:51	1.1	3:36	3.4
25	Mon	5:57	0.3	4:54	3.5
26	Tues	6:52	-0.6	6:05	3.3
27	Wed	7:41	-1.4	7:05	2.8
28	Thur	8:23	-2.0	8:01	2.1
29	Fri	9:05	-2.3	8:52	1.5
30	Sat	9:45	-2.4	9:43	1.0
31	SUN	10:25	-2.0	10:33	0.6

ALASKA DAYLIGHT TIME

HIGH Tides KODIAK District

AUGUST 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Mon	4:38	9.4	5:27	8.9
2	Tues	5:29	8.4	6:07	9.0
3	Wed	6:27	7.3	6:52	8.9
4	Thur	7:31	6.2	7:42	8.7
5	Fri	8:51	5.3	8:39	8.4
6	Sat	10:33	4.9	9:49	8.2
7	SUN	12:02△	5.1	10:59	8.2
8	Mon	....	....	1:08	5.6
9	Tues	0:02	8.4	1:50	6.0
10	Wed	0:55	8.7	2:27	6.5
11	Thur	1:40	8.9	2:57	6.9
12	Fri	2:18	9.0	3:26	7.2
13	Sat	2:54	8.9	3:51	7.5
14	SUN	3:29	8.7	4:16	7.7
15	Mon	4:01	8.3	4:41	7.8
16	Tues	4:34	7.8	5:06	7.9
17	Wed	5:09	7.1	5:31	7.9
18	Thur	5:48	6.4	6:03	7.9
19	Fri	6:33	5.6	6:38	7.8
20	Sat	7:33	4.9	7:25	7.7
21	SUN	9:12	4.5	8:31	7.6
22	Mon	11:07	4.6	9:52	7.9
23	Tues	12:18△	5.2	11:09	8.4
24	Wed	....	....	1:04	6.0
25	Thur	0:15	9.1	1:43	6.8
26	Fri	1:11	9.7	2:21	7.6
27	Sat	2:03	10.1	2:56	8.4
28	SUN	2:50	10.1	3:32	9.1
29	Mon	3:40	9.7	4:07	9.5
30	Tues	4:28	9.0	4:46	9.7
31	Wed	5:18	8.0	5:27	9.5

● BIGGER THE DOT – BETTER THE FISHING

LOW Tides KODIAK District

AUGUST 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Mon	11:03	-1.4	11:27	0.4
2	Tues	11:40	-0.5	....	....
3	Wed	0:22	0.4	12:21	0.6
4	Thur	1:25	0.5	1:04	1.6
5	Fri	2:37	0.6	1:52	2.6
6	Sat	4:00	0.6	2:58	3.3
7	SUN	5:21	0.3	4:24	3.7
8	Mon	6:29	-0.1	5:43	3.6
9	Tues	7:17	-0.5	6:44	3.2
10	Wed	7:57	-0.8	7:33	2.7
11	Thur	8:32	-0.9	8:12	2.3
12	Fri	9:01	-1.0	8:50	2.0
13	Sat	9:30	-0.9	9:24	1.6
14	SUN	9:55	-0.6	9:59	1.4
15	Mon	10:23	-0.2	10:36	1.3
16	Tues	10:48	0.3	11:11	1.2
17	Wed	11:11	0.9	11:50	1.2
18	Thur	11:38	1.5	....	....
19	Fri	0:38	1.4	12:04	2.2
20	Sat	1:34	1.5	12:42	2.8
21	SUN	2:50	1.4	1:31	3.4
22	Mon	4:16	1.1	3:01	3.8
23	Tues	5:31	0.4	4:40	3.6
24	Wed	6:28	-0.5	5:57	3.0
25	Thur	7:17	-1.2	6:58	2.1
26	Fri	7:58	-1.7	7:51	1.1
27	Sat	8:36	-1.9	8:40	0.2
28	SUN	9:15	-1.7	9:29	-0.5
29	Mon	9:53	-1.2	10:18	-0.8
30	Tues	10:31	-0.5	11:08	-0.9
31	Wed	11:07	0.4	....	....

ALASKA DAYLIGHT TIME

HIGH Tides KODIAK District

SEPTEMBER 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Thur	6:12	6.9	6:09	9.1
2	Fri	7:15	5.9	6:57	8.5
3	Sat	8:40	5.1	8:02	7.9
4	SUN	10:27	5.0	9:21	7.5
5	Mon	11:57	5.3	10:45	7.5
6	Tues	12:47△	5.8	11:54	7.8
7	Wed	....	....	1:24	6.4
8	Thur	0:45	8.1	1:53	6.9
9	Fri	1:24	8.3	2:18	7.3
10	Sat	2:03	8.5	2:43	7.8
11	SUN	2:38	8.4	3:08	8.1
12	Mon	3:10	8.3	3:30	8.3
13	Tues	3:42	7.9	3:55	8.5
14	Wed	4:17	7.5	4:17	8.5
15	Thur	4:49	6.9	4:42	8.4
16	Fri	5:27	6.2	5:13	8.3
17	Sat	6:14	5.6	5:50	8.0
18	SUN	7:20	4.9	6:40	7.7
19	Mon	9:01	4.6	7:55	7.5
20	Tues	10:51	5.0	9:28	7.6
21	Wed	11:50	5.7	10:57	8.0
22	Thur	....	....	12:31	6.6
23	Fri	0:03	8.6	1:07	7.6
24	Sat	1:00	9.1	1:43	8.5
25	SUN	1:51	9.4	2:20	9.4
26	Mon	2:41	9.3	2:54	10.0
27	Tues	3:28	8.9	3:32	10.2
28	Wed	4:18	8.3	4:09	10.2
29	Thur	5:07	7.5	4:50	9.7
30	Fri	6:01	6.6	5:32	9.1

● BIGGER THE DOT – BETTER THE FISHING

LOW Tides KODIAK District

SEPTEMBER 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Thur	0:00	-0.6	11:45△	1.4
2	Fri	0:59	-0.1	12:27	2.4
3	Sat	2:11	0.4	1:20	3.2
4	SUN	3:35	0.8	2:39	3.8
5	Mon	5:01	0.7	4:24	3.9
6	Tues	6:07	0.4	5:45	3.5
7	Wed	6:52	0.1	6:39	2.9
8	Thur	7:29	-0.2	7:21	2.2
9	Fri	7:59	-0.3	7:58	1.6
10	Sat	8:27	-0.3	8:31	1.1
11	SUN	8:51	-0.2	9:03	0.6
12	Mon	9:16	0.1	9:35	0.3
13	Tues	9:42	0.5	10:07	0.2
14	Wed	10:06	1.0	10:43	0.1
15	Thur	10:31	1.5	11:21	0.3
16	Fri	10:59	2.1	....	....
17	Sat	0:06	0.6	11:24△	2.7
18	SUN	0:59	0.9	12:06	3.2
19	Mon	2:15	1.0	1:10	3.8
20	Tues	3:43	0.9	2:56	3.9
21	Wed	4:58	0.4	4:40	3.4
22	Thur	5:57	-0.2	5:51	2.4
23	Fri	6:43	-0.7	6:51	1.2
24	Sat	7:25	-0.9	7:40	0.0
25	SUN	8:04	-0.9	8:29	-1.0
26	Mon	8:43	-0.6	9:15	-1.7
27	Tues	9:20	-0.1	10:01	-1.9
28	Wed	9:59	0.6	10:48	-1.7
29	Thur	10:34	1.4	11:37	-1.2
30	Fri	11:16	2.2	....	....

ALASKA DAYLIGHT TIME

HIGH Tides KODIAK District

OCTOBER 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Sat	7:03	5.8	6:22	8.3
2	SUN	8:24	5.3	7:26	7.5
3	Mon	10:02	5.3	8:53	6.9
4	Tues	11:18	5.7	10:18	6.9
5	Wed	12:06△	6.2	11:28	7.1
6	Thur	....	....	12:42	6.7
7	Fri	0:23	7.3	1:07	7.3
8	Sat	1:05	7.6	1:32	7.8
9	SUN	1:44	7.7	1:57	8.3
10	Mon	2:19	7.7	2:21	8.6
11	Tues	2:55	7.6	2:46	8.9
12	Wed	3:27	7.4	3:13	9.0
13	Thur	4:03	7.1	3:39	9.0
14	Fri	4:42	6.6	4:07	8.8
15	Sat	5:24	6.1	4:42	8.6
16	SUN	6:14	5.6	5:21	8.3
17	Mon	7:23	5.2	6:17	7.8
18	Tues	8:49	5.3	7:36	7.4
19	Wed	10:08	5.7	9:12	7.2
20	Thur	11:04	6.5	10:40	7.4
21	Fri	11:46	7.5	11:51	7.8
22	Sat	....	....	12:28	8.4
23	SUN	0:50	8.1	1:05	9.3
24	Mon	1:43	8.3	1:43	10.0
25	Tues	2:33	8.3	2:21	10.4
26	Wed	3:22	8.0	3:00	10.5
27	Thur	4:11	7.6	3:39	10.2
28	Fri	5:00	7.1	4:20	9.7
29	Sat	5:50	6.5	5:03	8.9
		DAYLIGHT TIME ENDS 2 A.M.			
30	SUN	5:51	6.0	4:48	8.1
31	Mon	7:00	5.7	5:49	7.3

● BIGGER THE DOT – BETTER THE FISHING

LOW Tides KODIAK District

OCTOBER 1988

DAY		AM TIME	AM FT	PM TIME	PM FT
1	Sat	0:33	-0.4	11:58△	3.0
2	SUN	1:39	0.3	12:57	3.7
3	Mon	2:59	0.8	2:28	4.1
4	Tues	4:19	1.0	4:17	3.9
5	Wed	5:25	0.9	5:33	3.2
6	Thur	6:10	0.7	6:23	2.4
7	Fri	6:46	0.6	7:02	1.7
8	Sat	7:16	0.6	7:37	0.9
9	SUN	7:43	0.7	8:09	0.3
10	Mon	8:11	0.8	8:41	-0.2
11	Tues	8:36	1.1	9:13	-0.6
12	Wed	9:05	1.4	9:48	-0.8
13	Thur	9:30	1.8	10:23	-0.7
14	Fri	9:58	2.2	11:02	-0.5
15	Sat	10:30	2.7	11:48	-0.2
16	SUN	11:07	3.1	....	....
17	Mon	0:41	0.2	11:54△	3.6
18	Tues	1:49	0.5	1:18	3.9
19	Wed	3:07	0.6	3:03	3.7
20	Thur	4:16	0.4	4:37	2.8
21	Fri	5:15	0.3	5:44	1.5
22	Sat	6:05	0.2	6:39	0.2
23	SUN	6:48	0.2	7:29	-1.0
24	Mon	7:30	0.4	8:16	-1.9
25	Tues	8:09	0.7	9:00	-2.4
26	Wed	8:51	1.1	9:45	-2.4
27	Thur	9:30	1.6	10:31	-2.1
28	Fri	10:10	2.2	11:19	-1.5
29	Sat	10:52	2.8	....	....
		DAYLIGHT TIME ENDS 2 A.M.			
30	SUN	0:11	-0.7	10:40△	3.3
31	Mon	0:07	0.1	11:43△	3.8

DAYLIGHT TIME THRU OCTOBER 29

INTRODUCTION

This book contains schedules of predicted tide changes with better fishing days indicated with DOTS of increasing size. Also contained are many pages of interesting and valuable information for ship captains, fishermen, sportsmen and visitors to the Pacific Coast. BE SURE to refer to CORRECTION TABLE to adjust time and height to your location.

Tide schedules are furnished by the National Ocean Survey, National Oceanic & Atmospheric Administration from calculations established by the known and predictable forces at established reference stations and are corrected periodically from studies of actual observations. The publisher of Dot's Fishing Guide is constantly in touch with this and other government agencies in its efforts to maintain up to date, accurate information.

"HIGH" Tide predictions are on the LEFT hand pages.

"LOW" Tide predictions are on the RIGHT hand pages.

"A.M." Times are mornings from 0:00 (Midnight) to NOON and are printed in light face type.

"P.M." Times are afternoons and evenings from NOON to 0:00 (Midnight) and are printed in BOLD TYPE.

"FT" represents the height of the tide water in feet and tenths of a foot above, or − below, a fixed reference point of 0.0 Zero.

TABLE OF CONTENTS

NOTICE

The tide tables and the corrections in this book have been figured based on the premise of average weather. Be aware that conditions not considered average for the area will effect the published predictions.

During times of storm or extreme conditions, the mariner is well advised to keep informed of local weather forecasts as they relate to the effects on these tide tables.

NUSHAGAK BAY DISTRICT CORRECTION TABLE

To correct the TIME and HEIGHT for HIGH or LOW tides for the points given below, add or subtract TIME and FEET from the NUSHAGAK District Tide Table

	TIME High	TIME Low	FEET High	FEET Low
BRISTOL BAY				
Port Moller (Entrance Point)	−4:30	−4:59	*.56	*.96
Port Heiden	−3:03	−2:55	*0.62	*1.04
EGEGIK RIVER				
Entrance	−1:30	−1:13	*.92	*.82
Egegik	−1:04	+0:36	*.65	*.32
Middle Bluff Kvichak Bay	−0:50	−0:50	0.0	0.0
NAKNEK RIVER				
Entrance#	−0:19	+0:26	+2.9#	−0.3
Morakas Point	−0:11	+1:37	*.90	*.36
Omakstalia Point	+0:12	+2:35	*.37	*.12
Naknek Air Base	+0:57	+4:46	*.13	*.08
KVICHAK RIVER				
Nakeen	+0:04	+2:01	*.90	*.38
Kvichak	+0:35	+2:40	*.83	*.36
Levelock	+1:27	+4:34	*.40	*.30
NUSHAGAK BAY				
Protection Point	−0:12	−0:22	−2.6	0.0
Snag Point	+0:49	+1:07	+0.2	−0.4
Black Rock, Walrus Islands	+0:07	−0:07	−10.1	*.70
ST. LAWRENCE ISLAND				
Northeast Cape	−1:37	−2:22	*.12	*.08
Fossil River Ent	−2:06	−2:34	*.08	*.08
Niyrakpak Lagoon Entrance	−2:33	−2:57	*.06	*.06

#No Low water falls below −2 feet.
* Multiply height of District Tide by proper ratio to correct height of High or Low Tides.

HIGH Tides NUSHAGAK District
APRIL 1988

1	Fri	●	2:35	15.2	**2:50**	**15.8**
2	Sat	●	3:24	15.8	**3:22**	**15.1**
DAYLIGHT TIME STARTS 2 A.M.						
3	SUN	●	5:13	16.6	**4:57**	**14.5**
4	Mon	●	6:01	17.4	**5:30**	**14.0**
5	Tues	•	6:44	18.2	**6:06**	**13.7**
6	Wed	•	7:29	19.0	**6:47**	**13.6**
7	Thur	•	8:16	19.6	**7:29**	**13.8**
8	Fri	•	9:02	20.2	**8:15**	**14.1**
9	Sat	·	9:49	20.6	**9:08**	**14.6**
10	SUN	·	10:38	20.8	**10:09**	**15.1**
11	Mon	·	11:27	20.8	**11:11**	**15.8**
12	Tues	·			**12:17**	**20.6**
13	Wed	•	0:18	16.6	**1:06**	**20.3**
14	Thur	•	1:28	17.6	**1:56**	**19.7**
15	Fri	•	2:35	18.8	**2:46**	**18.9**
16	Sat	●	3:42	20.0	**3:38**	**18.1**
17	SUN	●	4:45	21.0	**4:30**	**17.2**
18	Mon	●	5:45	21.8	**5:23**	**16.4**
19	Tues	●	6:44	22.2	**6:18**	**15.7**
20	Wed	●	7:36	22.2	**7:11**	**15.1**
21	Thur	●	8:30	21.8	**8:06**	**14.7**
22	Fri	●	9:20	21.3	**8:58**	**14.4**
23	Sat	●	10:08	20.6	**9:51**	**14.1**
24	SUN	●	10:54	19.8	**10:44**	**14.1**
25	Mon	●	11:39	19.0	**11:40**	**14.2**
26	Tues	●			**12:18**	**18.2**
27	Wed	●	0:35	14.5	**12:57**	**17.3**
28	Thur	●	1:30	15.0	**1:34**	**16.5**
29	Fri	●	2:24	15.7	**2:12**	**15.7**
30	Sat	●	3:16	16.6	**2:47**	**14.9**

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District
APRIL 1988

1	Fri	●	8:45	4.8	**9:11**	**4.0**
2	Sat	●	9:35	5.6	**9:50**	**3.4**
DAYLIGHT TIME STARTS 2 A.M.						
3	SUN	●	11:24	6.1	**11:25**	**2.8**
4	Mon	●			**12:15**	**6.6**
5	Tues	•	0:03	2.2	**1:03**	**6.8**
6	Wed	•	0:43	1.5	**1:50**	**7.0**
7	Thur	•	1:22	0.8	**2:39**	**7.0**
8	Fri	•	2:08	0.2	**3:25**	**6.9**
9	Sat	·	2:57	-0.3	**4:11**	**6.5**
10	SUN	·	3:49	-0.6	**5:00**	**5.9**
11	Mon	·	4:43	-0.6	**5:49**	**4.9**
12	Tues	·	5:40	-0.2	**6:41**	**3.7**
13	Wed	•	6:41	0.6	**7:33**	**2.1**
14	Thur	•	7:45	1.5	**8:22**	**0.7**
15	Fri	•	8:48	2.5	**9:16**	**-0.6**
16	Sat	●	9:51	3.4	**10:06**	**-1.6**
17	SUN	●	10:54	4.1	**10:59**	**-2.2**
18	Mon	●	11:54	4.6	**11:51**	**-2.3**
19	Tues	●			**12:54**	**4.9**
20	Wed	●	0:44	-2.1	**1:51**	**5.1**
21	Thur	●	1:34	-1.5	**2:47**	**5.2**
22	Fri	●	2:26	-0.7	**3:36**	**5.3**
23	Sat	●	3:15	0.1	**4:25**	**5.3**
24	SUN	●	4:06	1.1	**5:13**	**5.1**
25	Mon	●	4:55	2.1	**5:59**	**4.9**
26	Tues	●	5:47	3.1	**6:44**	**4.4**
27	Wed	●	6:39	4.1	**7:25**	**3.9**
28	Thur	●	7:31	5.1	**8:04**	**3.2**
29	Fri	●	8:25	6.0	**8:43**	**2.6**
30	Sat	●	9:19	6.6	**9:22**	**2.0**

STANDARD TIME THRU APRIL 2

HIGH Tides NUSHAGAK District
MAY 1988

1	SUN	●	4:05	17.5	**3:23**	**14.2**
2	Mon	●	4:53	18.5	**4:01**	**13.6**
3	Tues	•	5:36	19.4	**4:40**	**13.3**
4	Wed	•	6:21	20.1	**5:22**	**13.2**
5	Thur	•	7:06	20.8	**6:11**	**13.3**
6	Fri	·	7:51	21.3	**7:03**	**13.5**
7	Sat	·	8:38	21.6	**8:00**	**14.0**
8	SUN	·	9:24	21.7	**9:05**	**14.5**
9	Mon	·	10:10	21.5	**10:10**	**15.3**
10	Tues	•	10:58	21.1	**11:18**	**16.2**
11	Wed	•	11:44	20.5		
12	Thur	•	0:27	17.4	**12:33**	**19.7**
13	Fri	●	1:33	18.7	**1:22**	**18.7**
14	Sat	●	2:39	20.0	**2:14**	**17.6**
15	SUN	●	3:41	21.1	**3:06**	**16.6**
16	Mon	●	4:40	21.9	**4:01**	**15.7**
17	Tues	●	5:36	22.3	**4:54**	**14.9**
18	Wed	●	6:28	22.3	**5:49**	**14.2**
19	Thur	●	7:17	22.0	**6:41**	**13.7**
20	Fri	●	8:06	21.5	**7:37**	**13.4**
21	Sat	●	8:47	20.9	**8:27**	**13.2**
22	SUN	●	9:29	20.2	**9:23**	**13.2**
23	Mon	●	10:10	19.5	**10:18**	**13.4**
24	Tues	●	10:47	18.6	**11:15**	**13.9**
25	Wed	●	11:24	17.8		
26	Thur	●	0:09	14.7	11:59∆	16.9
27	Fri	●	1:06	15.6	**12:34**	**16.1**
28	Sat	●	1:58	16.7	**1:09**	**15.3**
29	SUN	•	2:47	17.8	**1:48**	**14.6**
30	Mon	•	3:36	18.9	**2:27**	**14.0**
31	Tues	•	4:21	19.9	**3:09**	**13.7**

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District
MAY 1988

1	SUN	●	10:11	7.1	**10:01**	**·1.4**
2	Mon	●	11:05	7.4	**10:41**	**0.9**
3	Tues	•	11:56	7.5	**11:19**	**0.3**
4	Wed	•			**12:43**	**7.4**
5	Thur	·	0:05	-0.2	**1:33**	**7.2**
6	Fri	·	0:50	-0.6	**2:18**	**6.8**
7	Sat	·	1:37	-0.8	**3:07**	**6.1**
8	SUN	·	2:32	-0.7	**3:52**	**5.2**
9	Mon	·	3:28	-0.2	**4:41**	**3.9**
10	Tues	•	4:26	0.7	**5:30**	**2.4**
11	Wed	•	5:27	1.8	**6:21**	**0.7**
12	Thur	•	6:31	3.0	**7:11**	**-0.6**
13	Fri	●	7:36	4.1	**8:02**	**-1.8**
14	Sat	●	8:41	5.0	**8:52**	**-2.6**
15	SUN	●	9:44	5.6	**9:42**	**-2.9**
16	Mon	●	10:46	5.9	**10:34**	**-2.8**
17	Tues	●	11:45	6.0	**11:23**	**-2.3**
18	Wed	●			**12:42**	**6.0**
19	Thur	●	0:14	-1.6	**1:33**	**5.9**
20	Fri	●	1:03	-0.7	**2:24**	**5.8**
21	Sat	●	1:51	0.2	**3:14**	**5.5**
22	SUN	●	2:41	1.3	**3:59**	**5.2**
23	Mon	●	3:27	2.4	**4:41**	**4.6**
24	Tues	●	4:16	3.6	**5:23**	**4.0**
25	Wed	●	5:08	4.8	**6:01**	**3.2**
26	Thur	●	6:01	5.8	**6:40**	**2.4**
27	Fri	●	6:57	6.8	**7:19**	**1.6**
28	Sat	●	7:51	7.5	**7:58**	**0.9**
29	SUN	•	8:50	8.0	**8:39**	**0.2**
30	Mon	•	9:44	8.2	**9:20**	**-0.4**
31	Tues	•	10:36	8.2	**10:02**	**-1.0**

DAYLIGHT TIME

HIGH Tides NUSHAGAK District
JUNE 1988

1	Wed	·	5:10	20.7	**3:55**	**13.5**
2	Thur	·	5:56	21.4	**4:45**	**13.5**
3	Fri	·	6:40	21.9	**5:46**	**13.7**
4	Sat	·	7:26	22.3	**6:48**	**14.0**
5	SUN	·	8:12	22.3	**7:54**	**14.5**
6	Mon	•	8:58	22.1	**9:03**	**15.2**
7	Tues	•	9:44	21.7	**10:12**	**16.2**
8	Wed	•	10:29	21.0	**11:22**	**17.4**
9	Thur	●	11:18	20.0		
10	Fri	●	0:29	18.7	**12:07**	**18.9**
11	Sat	●	1:35	19.9	**12:57**	**17.8**
12	SUN	●	2:37	20.9	**1:48**	**16.6**
13	Mon	●	3:35	21.6	**2:41**	**15.6**
14	Tues	●	4:31	21.9	**3:35**	**14.7**
15	Wed	●	5:22	21.9	**4:28**	**14.0**
16	Thur	●	6:09	21.7	**5:21**	**13.4**
17	Fri	●	6:54	21.2	**6:12**	**13.0**
18	Sat	●	7:37	20.7	**7:06**	**12.7**
19	SUN	●	8:16	20.1	**7:59**	**12.7**
20	Mon	●	8:51	19.5	**8:54**	**13.0**
21	Tues	●	9:24	18.8	**9:49**	**13.5**
22	Wed	●	9:59	18.0	**10:45**	**14.3**
23	Thur	●	10:31	17.3	**11:42**	**15.3**
24	Fri	●	11:03	16.5		
25	Sat	●	0:33	16.4	11:38∆	15.8
26	SUN	•	1:23	17.5	**12:17**	**15.2**
27	Mon	•	2:15	18.6	**12:59**	**14.8**
28	Tues	•	3:00	19.6	**1:41**	**14.5**
29	Wed	·	3:51	20.5	**2:33**	**14.4**
30	Thur	·	4:38	21.3	**3:27**	**14.4**

● BIGGER THE DOT — BETTER THE FISHING

LOW Tides NUSHAGAK District
JUNE 1988

1	Wed	•	11:29	8.1	**10:48**	**-1.4**
2	Thur	·	**12:18∆**	**7.7**	**11:34**	**-1.7**
3	Fri	·			**1:04**	**7.1**
4	Sat	·	0:25	-1.7	**1:55**	**6.1**
5	SUN	·	1:17	-1.3	**2:45**	**4.8**
6	Mon	•	2:13	-0.4	**3:32**	**3.2**
7	Tues	•	3:12	0.8	**4:21**	**1.5**
8	Wed	•	4:14	2.2	**5:11**	**-0.2**
9	Thur	●	5:17	3.7	**6:00**	**-1.6**
10	Fri	●	6:22	4.9	**6:49**	**-2.6**
11	Sat	●	7:28	5.9	**7:41**	**-3.2**
12	SUN	●	8:31	6.6	**8:32**	**-3.4**
13	Mon	●	9:34	6.9	**9:21**	**-3.1**
14	Tues	●	10:34	7.0	**10:12**	**-2.5**
15	Wed	●	11:31	6.9	**11:01**	**-1.7**
16	Thur	●	**12:25∆**	**6.8**	**11:49**	**-0.8**
17	Fri	●			**1:13**	**6.5**
18	Sat	●	0:35	0.2	**1:59**	**6.2**
19	SUN	●	1:20	1.3	**2:45**	**5.6**
20	Mon	●	2:06	2.5	**3:25**	**5.0**
21	Tues	●	2:51	3.7	**4:02**	**4.1**
22	Wed	●	3:40	4.9	**4:41**	**3.2**
23	Thur	●	4:33	6.0	**5:19**	**2.3**
24	Fri	●	5:26	7.0	**5:55**	**1.3**
25	Sat	●	6:23	7.8	**6:37**	**0.5**
26	SUN	•	7:19	8.3	**7:16**	**-0.4**
27	Mon	•	8:14	8.6	**7:58**	**-1.1**
28	Tues	•	9:08	8.7	**8:42**	**-1.8**
29	Wed	·	10:01	8.6	**9:30**	**-2.3**
30	Thur	·	10:54	8.1	**10:18**	**-2.6**

DAYLIGHT TIME

HIGH Tides NUSHAGAK District
JULY 1988

			AM		PM	
1	Fri	•	5:25	21.9	4:27	14.5
2	Sat	•	6:11	22.3	5:33	14.8
3	SUN	•	6:57	22.4	6:41	15.3
4	Mon	•	7:44	22.2	7:51	15.9
5	Tues	•	8:30	21.8	9:02	16.9
6	Wed	•	9:16	21.1	10:12	17.9
7	Thur	●	10:04	20.2	11:18	19.0
8	Fri	●	10:54	19.1	. . . .	. . .
9	Sat	●	0:24	20.0	11:45≙	18.1
10	SUN	●	1:26	20.7	12:37	17.0
11	Mon	●	2:24	21.1	1:29	16.0
12	Tues	●	3:21	21.2	2:21	15.1
13	Wed	●	4:12	21.1	3:17	14.3
14	Thur	●	5:02	20.8	4:09	13.7
15	Fri	●	5:48	20.4	4:59	13.2
16	Sat	●	6:28	20.0	5:50	12.9
17	SUN	●	7:06	19.4	6:42	12.9
18	Mon	●	7:38	18.8	7:34	13.1
19	Tues	●	8:09	18.2	8:28	13.6
20	Wed	●	8:41	17.5	9:21	14.3
21	Thur	●	9:10	16.9	10:14	15.2
22	Fri	●	9:43	16.3	11:03	16.2
23	Sat	●	10:17	15.9	11:55	17.3
24	SUN	•	10:52	15.5	. . . .	. . .
25	Mon	•	0:44	18.2	11:34≙	15.3
26	Tues	•	1:36	19.1	12:20	15.3
27	Wed	•	2:26	20.0	1:12	15.3
28	Thur	•	3:15	20.7	2:11	15.4
29	Fri	•	4:05	21.2	3:13	15.6
30	Sat	•	4:51	21.6	4:17	16.0
31	SUN	•	5:40	21.7	5:27	16.5

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides NUSHAGAK District
JULY 1988

			AM		PM	
1	Fri	•	11:42	7.3	11:12	-2.4
2	Sat	•	. . . .	. . .	12:35	6.1
3	SUN	•	0:06	-1.9	1:24	4.6
4	Mon	•	1:05	-0.9	2:15	2.8
5	Tues	•	2:01	0.5	3:04	1.0
6	Wed	•	3:04	2.0	3:57	-0.7
7	Thur	•	4:05	3.5	4:46	-2.1
8	Fri	●	5:11	4.9	5:38	-3.0
9	Sat	●	6:14	5.9	6:29	-3.4
10	SUN	●	7:17	6.6	7:21	-3.4
11	Mon	●	8:20	7.1	8:12	-3.0
12	Tues	●	9:18	7.3	9:01	-2.3
13	Wed	●	10:15	7.3	9:50	-1.6
14	Thur	●	11:07	7.3	10:38	-0.6
15	Fri	●	11:59	7.1	11:24	0.5
16	Sat	●	. . . .	. . .	12:45	6.7
17	SUN	●	0:09	1.5	1:27	6.1
18	Mon	●	0:52	2.7	2:05	5.4
19	Tues	●	1:37	3.8	2:44	4.6
20	Wed	●	2:26	4.9	3:19	3.7
21	Thur	●	3:14	5.9	3:55	2.7
22	Fri	●	4:07	6.8	4:35	1.8
23	Sat	●	4:59	7.5	5:13	0.8
24	SUN	•	5:49	8.1	5:53	-0.1
25	Mon	•	6:45	8.5	6:35	-1.0
26	Tues	•	7:38	8.6	7:25	-1.8
27	Wed	•	8:30	8.5	8:12	-2.4
28	Thur	•	9:22	8.0	9:04	-2.6
29	Fri	•	10:17	7.1	9:59	-2.5
30	Sat	•	11:07	5.9	10:55	-1.9
31	SUN	•	11:59	4.2	11:54	-0.9

DAYLIGHT TIME

HIGH Tides NUSHAGAK District
AUGUST 1988

			AM		PM	
1	Mon	•	6:26	21.6	6:38	17.2
2	Tues	•	7:13	21.2	7:48	18.1
3	Wed	●	8:02	20.6	8:54	19.1
4	Thur	●	8:53	19.8	10:00	19.9
5	Fri	●	9:42	18.9	11:03	20.5
6	Sat	●	10:34	18.1	. . . .	. . .
7	SUN	●	0:05	20.8	11:29≙	17.2
8	Mon	●	1:04	20.8	12:20	16.4
9	Tues	●	2:03	20.7	1:17	15.6
10	Wed	●	3:00	20.3	2:08	14.9
11	Thur	●	3:46	19.9	3:01	14.3
12	Fri	●	4:32	19.4	3:54	13.9
13	Sat	●	5:14	18.9	4:43	13.6
14	SUN	●	5:52	18.3	5:36	13.6
15	Mon	●	6:23	17.6	6:26	13.9
16	Tues	●	6:55	17.0	7:15	14.4
17	Wed	●	7:25	16.4	8:04	15.1
18	Thur	●	7:55	15.9	8:53	15.9
19	Fri	●	8:27	15.5	9:41	16.7
20	Sat	•	9:00	15.2	10:27	17.5
21	SUN	•	9:38	15.1	11:16	18.3
22	Mon	•	10:18	15.2	. . . .	. . .
23	Tues	•	0:06	19.0	11:05≙	15.3
24	Wed	•	0:56	19.6	11:57≙	15.6
25	Thur	•	1:48	20.1	12:56	16.0
26	Fri	•	2:37	20.5	2:00	16.4
27	Sat	•	3:25	20.7	3:07	17.0
28	SUN	•	4:15	20.6	4:16	17.7
29	Mon	•	5:03	20.4	5:25	18.7
30	Tues	•	5:54	20.0	6:31	19.6
31	Wed	•	6:43	19.5	7:37	20.5

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides NUSHAGAK District
AUGUST 1988

			AM		PM	
1	Mon	•	. . . .	. . .	12:51	2.4
2	Tues	•	0:53	0.3	1:43	0.6
3	Wed	•	1:55	1.8	2:35	-1.0
4	Thur	•	2:57	3.1	3:28	-2.2
5	Fri	●	3:58	4.3	4:21	-2.9
6	Sat	●	5:00	5.3	5:14	-3.2
7	SUN	●	6:00	6.0	6:08	-3.0
8	Mon	●	7:01	6.5	6:58	-2.5
9	Tues	●	7:58	6.8	7:53	-1.7
10	Wed	●	8:54	7.0	8:40	-1.0
11	Thur	●	9:46	7.0	9:31	0.1
12	Fri	●	10:37	6.9	10:16	1.1
13	Sat	●	11:23	6.5	11:02	2.1
14	SUN	●	12:06≙	6.1	11:47	3.2
15	Mon	●	. . . .	. . .	12:44	5.5
16	Tues	●	0:32	4.2	1:20	4.7
17	Wed	●	1:18	5.1	1:55	4.0
18	Thur	●	2:07	5.9	2:32	3.2
19	Fri	●	2:56	6.6	3:10	2.3
20	Sat	•	3:45	7.2	3:49	1.4
21	SUN	•	4:33	7.6	4:29	0.5
22	Mon	•	5:24	7.9	5:14	-0.3
23	Tues	•	6:13	8.0	6:01	-1.1
24	Wed	•	7:05	7.8	6:54	-1.6
25	Thur	•	7:56	7.3	7:47	-1.9
26	Fri	•	8:49	6.3	8:42	-1.7
27	Sat	•	9:39	5.0	9:41	-1.1
28	SUN	•	10:34	3.4	10:40	-0.2
29	Mon	•	11:26	1.6	11:42	0.9
30	Tues	•	. . . .	. . .	12:19	0.0
31	Wed	•	0:44	2.0	1:11	-1.4

DAYLIGHT TIME

HIGH Tides NUSHAGAK District
SEPTEMBER 1988

			AM		PM	
1	Thur	●	7:35	18.8	8:42	21.1
2	Fri	●	8:27	18.2	9:44	21.4
3	Sat	●	9:23	17.5	10:43	21.4
4	SUN	●	10:15	16.9	11:42	21.0
5	Mon	●	11:11	16.3	. . . .	. . .
6	Tues	●	0:38	20.5	12:06	15.8
7	Wed	●	1:30	19.9	1:01	15.3
8	Thur	●	2:21	19.3	1:54	14.9
9	Fri	●	3:07	18.6	2:47	14.6
10	Sat	●	3:49	17.9	3:40	14.6
11	SUN	●	4:28	17.2	4:33	14.7
12	Mon	●	5:02	16.4	5:22	15.1
13	Tues	●	5:34	15.7	6:11	15.6
14	Wed	●	6:06	15.1	6:56	16.3
15	Thur	●	6:37	14.6	7:42	17.0
16	Fri	•	7:13	14.2	8:24	17.7
17	Sat	•	7:45	14.0	9:09	18.3
18	SUN	•	8:23	14.1	9:54	18.9
19	Mon	•	9:05	14.3	10:40	19.4
20	Tues	•	9:54	14.7	11:31	19.8
21	Wed	•	10:50	15.2	. . . .	. . .
22	Thur	•	0:18	20.0	11:47≙	15.8
23	Fri	•	1:06	20.1	12:54	16.5
24	Sat	•	1:56	20.0	2:01	17.4
25	SUN	•	2:45	19.8	3:08	18.5
26	Mon	•	3:37	19.3	4:18	19.7
27	Tues	•	4:27	18.8	5:23	20.8
28	Wed	•	5:19	18.2	6:26	21.7
29	Thur	•	6:14	17.5	7:25	22.3
30	Fri	●	7:09	17.0	8:24	22.4

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides NUSHAGAK District
SEPTEMBER 1988

			AM		PM	
1	Thur	●	1:47	3.0	2:05	-2.3
2	Fri	●	2:47	3.9	2:58	-2.8
3	Sat	●	3:47	4.6	3:55	-2.7
4	SUN	●	4:47	5.1	4:48	-2.3
5	Mon	●	5:43	5.5	5:43	-1.7
6	Tues	●	6:39	5.8	6:35	-0.9
7	Wed	●	7:33	6.0	7:25	0.1
8	Thur	●	8:25	6.0	8:17	1.1
9	Fri	●	9:14	5.9	9:05	2.1
10	Sat	●	9:59	5.7	9:54	3.1
11	SUN	●	10:39	5.3	10:43	4.1
12	Mon	●	11:20	4.8	11:28	4.9
13	Tues	●	11:57	4.2	. . . .	. . .
14	Wed	●	0:17	5.6	12:32	3.6
15	Thur	●	1:07	6.2	1:08	3.1
16	Fri	●	1:53	6.7	1:46	2.4
17	Sat	•	2:40	7.0	2:26	1.7
18	SUN	•	3:26	7.2	3:07	1.0
19	Mon	•	4:12	7.3	3:51	0.3
20	Tues	•	4:59	7.2	4:40	-0.2
21	Wed	•	5:48	6.9	5:32	-0.6
22	Thur	•	6:36	6.2	6:28	-0.6
23	Fri	•	7:27	5.1	7:27	-0.2
24	Sat	•	8:18	3.7	8:27	0.4
25	SUN	•	9:10	2.0	9:28	1.3
26	Mon	•	10:02	0.4	10:31	2.2
27	Tues	•	10:54	-1.0	11:36	3.0
28	Wed	•	11:49	-2.1	. . . .	. . .
29	Thur	●	0:37	3.6	12:41	-2.7
30	Fri	●	1:37	4.1	1:36	-2.8

DAYLIGHT TIME

HIGH Tides NUSHAGAK District
OCTOBER 1988

			AM		PM	
1	Sat	●	8:05	16.5	9:21	22.2
2	SUN	●	9:01	16.0	10:15	21.7
3	Mon	●	9:57	15.7	11:09	20.9
4	Tues	●	10:55	15.3	. . . .	. . .
5	Wed	●	0:00	20.1	11:48≙	15.1
6	Thur	●	0:50	19.2	12:46	14.9
7	Fri	●	1:36	18.4	1:40	15.0
8	Sat	●	2:16	17.4	2:37	15.2
9	SUN	●	2:55	16.5	3:29	15.6
10	Mon	●	3:30	15.7	4:18	16.2
11	Tues	●	4:06	14.8	5:05	16.9
12	Wed	•	4:41	14.1	5:51	17.6
13	Thur	•	5:16	13.6	6:33	18.3
14	Fri	•	5:48	13.2	7:15	18.9
15	Sat	•	6:28	13.0	7:58	19.4
16	SUN	•	7:09	13.1	8:40	19.9
17	Mon	•	7:51	13.4	9:25	20.2
18	Tues	•	8:44	13.8	10:11	20.4
19	Wed	•	9:42	14.4	10:57	20.5
20	Thur	•	10:42	15.2	11:43	20.4
21	Fri	•	11:47	16.1	. . . .	. . .
22	Sat	•	0:29	20.0	12:57	17.3
23	SUN	•	1:20	19.5	2:04	18.6
24	Mon	•	2:09	18.8	3:10	20.1
25	Tues	●	3:01	18.0	4:15	21.4
26	Wed	●	3:54	17.2	5:15	22.3
27	Thur	●	4:49	16.5	6:14	22.9
28	Fri	●	5:45	15.9	7:09	23.1
29	Sat	●	6:41	15.4	8:05	22.8
	DAYLIGHT TIME ENDS 2 A.M.					
30	SUN	●	6:38	15.0	7:57	22.3
31	Mon	●	7:38	14.7	8:47	21.5

• BIGGER THE DOT – BETTER THE FISHING

LOW Tides NUSHAGAK District
OCTOBER 1988

			AM		PM	
1	Sat	●	2:36	4.4	2:31	-2.5
2	SUN	●	3:33	4.6	3:24	-1.9
3	Mon	●	4:27	4.8	4:17	-1.0
4	Tues	●	5:21	5.0	5:11	0.0
5	Wed	●	6:14	5.0	6:04	1.1
6	Thur	●	7:00	4.9	6:55	2.2
7	Fri	●	7:49	4.7	7:48	3.3
8	Sat	●	8:31	4.3	8:40	4.3
9	SUN	●	9:13	3.9	9:32	5.2
10	Mon	●	9:52	3.5	10:21	6.0
11	Tues	●	10:32	3.0	11:14	6.5
12	Wed	●	11:08	2.5	. . . .	. . .
13	Thur	•	0:02	6.9	11:47≙	2.2
14	Fri	•	0:53	7.1	12:23	1.8
15	Sat	•	1:38	7.2	1:05	1.3
16	SUN	•	2:24	7.2	1:47	0.8
17	Mon	•	3:06	7.1	2:30	0.4
18	Tues	•	3:54	6.8	3:19	0.2
19	Wed	•	4:38	6.1	4:11	0.2
20	Thur	•	5:25	5.1	5:10	0.6
21	Fri	•	6:11	3.8	6:09	1.3
22	Sat	•	7:03	2.2	7:12	2.2
23	SUN	•	7:52	0.6	8:17	3.1
24	Mon	•	8:42	-0.9	9:20	3.9
25	Tues	•	9:35	-2.2	10:23	4.5
26	Wed	•	10:27	-3.0	11:27	4.8
27	Thur	•	11:20	-3.3	. . . .	. . .
28	Fri	●	0:27	4.9	12:14	-3.1
29	Sat	●	1:25	5.0	1:06	-2.6
	DAYLIGHT TIME ENDS 2 A.M.					
30	SUN	●	1:23	4.9	1:00	-1.7
31	Mon	●	2:13	4.8	1:52	-0.7

DAYLIGHT TIME THRU OCTOBER 29

CALENDAR WEEKS TO BE USED FOR CATCH STATISTICS

STAT WEEK	YEAR/DATE 1987	YEAR/DATE 1988	YEAR/DATE 1989	YEAR/DATE 1990	YEAR/DATE 1991	YEAR/DATE 1992	YEAR/DATE 1993	YEAR/DATE 1994	YEAR/DATE 1995
1	0101 - 0103	0101 - 0102	0101 - 0107	0101 - 0106	0101 - 0105	0101 - 0104	0101 - 0102	0101 - 0101	0101 - 0107
2	0104 - 0110	0103 - 0109	0108 - 0114	0107 - 0113	0106 - 0112	0105 - 0111	0103 - 0109	0102 - 0108	0108 - 0114
3	0111 - 0117	0110 - 0116	0115 - 0121	0114 - 0120	0113 - 0119	0112 - 0118	0110 - 0116	0109 - 0115	0115 - 0121
4	0118 - 0124	0117 - 0123	0122 - 0128	0121 - 0127	0120 - 0126	0119 - 0125	0117 - 0123	0116 - 0122	0122 - 0128
5	0125 - 0131	0124 - 0130	0129 - 0204	0128 - 0203	0127 - 0202	0126 - 0201	0124 - 0130	0123 - 0129	0129 - 0204
6	0201 - 0207	0131 - 0206	0205 - 0211	0204 - 0210	0203 - 0209	0202 - 0208	0131 - 0206	0130 - 0205	0205 - 0211
7	0208 - 0214	0207 - 0213	0212 - 0218	0211 - 0217	0210 - 0216	0209 - 0215	0207 - 0213	0206 - 0212	0212 - 0218
8	0215 - 0221	0214 - 0220	0219 - 0225	0218 - 0224	0217 - 0223	0216 - 0222	0214 - 0220	0213 - 0219	0219 - 0225
9	0222 - 0228	0221 - 0227	0226 - 0304	0225 - 0303	0224 - 0302	0223 - 0229	0221 - 0227	0220 - 0226	0226 - 0304
10	0301 - 0307	0228 - 0305	0305 - 0311	0304 - 0310	0303 - 0309	0301 - 0307	0228 - 0306	0227 - 0305	0305 - 0311
11	0308 - 0314	0306 - 0312	0312 - 0318	0311 - 0317	0310 - 0316	0308 - 0314	0307 - 0313	0306 - 0312	0312 - 0318
12	0315 - 0321	0313 - 0319	0319 - 0325	0318 - 0324	0317 - 0323	0315 - 0321	0314 - 0320	0313 - 0319	0319 - 0325
13	0322 - 0328	0320 - 0326	0326 - 0401	0325 - 0331	0324 - 0330	0322 - 0328	0321 - 0327	0320 - 0326	0326 - 0401
14	0329 - 0404	0327 - 0402	0402 - 0408	0401 - 0407	0331 - 0406	0329 - 0404	0328 - 0403	0327 - 0402	0402 - 0408
15	0405 - 0411	0403 - 0409	0409 - 0415	0408 - 0414	0407 - 0413	0405 - 0411	0404 - 0410	0403 - 0409	0409 - 0415
16	0412 - 0418	0410 - 0416	0416 - 0422	0415 - 0421	0414 - 0420	0412 - 0418	0411 - 0417	0410 - 0416	0416 - 0422
17	0419 - 0425	0417 - 0423	0423 - 0429	0422 - 0428	0421 - 0427	0419 - 0425	0418 - 0424	0417 - 0423	0423 - 0429
18	0426 - 0502	0424 - 0430	0430 - 0506	0429 - 0505	0428 - 0504	0426 - 0502	0425 - 0501	0424 - 0430	0430 - 0506
19	0503 - 0509	0501 - 0507	0507 - 0513	0506 - 0512	0505 - 0511	0503 - 0509	0502 - 0508	0501 - 0507	0507 - 0513
20	0510 - 0516	0508 - 0514	0514 - 0520	0513 - 0519	0512 - 0518	0510 - 0516	0509 - 0515	0508 - 0514	0514 - 0520
21	0517 - 0523	0515 - 0521	0521 - 0527	0520 - 0526	0519 - 0525	0517 - 0523	0516 - 0522	0515 - 0521	0521 - 0527
22	0524 - 0530	0522 - 0528	0528 - 0603	0527 - 0602	0526 - 0601	0524 - 0530	0523 - 0529	0522 - 0528	0528 - 0603
23	0531 - 0606	0529 - 0604	0604 - 0610	0603 - 0609	0602 - 0608	0531 - 0606	0530 - 0605	0529 - 0604	0604 - 0610
24	0607 - 0613	0605 - 0611	0611 - 0617	0610 - 0616	0609 - 0615	0607 - 0613	0606 - 0612	0605 - 0611	0611 - 0617
25	0614 - 0620	0612 - 0618	0618 - 0624	0617 - 0623	0616 - 0622	0614 - 0620	0613 - 0619	0612 - 0618	0618 - 0624
26	0621 - 0627	0619 - 0625	0625 - 0701	0624 - 0630	0623 - 0629	0621 - 0627	0620 - 0626	0619 - 0625	0625 - 0701
27	0628 - 0704	0626 - 0702	0702 - 0708	0701 - 0707	0630 - 0706	0628 - 0704	0627 - 0703	0626 - 0702	0702 - 0708
28	0705 - 0711	0703 - 0709	0709 - 0715	0708 - 0714	0707 - 0713	0705 - 0711	0704 - 0710	0703 - 0709	0709 - 0715
29	0712 - 0718	0710 - 0716	0716 - 0722	0715 - 0721	0714 - 0720	0712 - 0718	0711 - 0717	0710 - 0716	0716 - 0722
30	0719 - 0725	0717 - 0723	0723 - 0729	0722 - 0728	0721 - 0727	0719 - 0725	0718 - 0724	0717 - 0723	0723 - 0729
31	0726 - 0801	0724 - 0730	0730 - 0805	0729 - 0804	0728 - 0803	0726 - 0801	0725 - 0731	0724 - 0730	0730 - 0805
32	0802 - 0808	0731 - 0806	0806 - 0812	0805 - 0811	0804 - 0810	0802 - 0808	0801 - 0807	0731 - 0806	0806 - 0812
33	0809 - 0815	0807 - 0813	0813 - 0819	0812 - 0818	0811 - 0817	0809 - 0815	0808 - 0814	0807 - 0813	0813 - 0819
34	0816 - 0822	0814 - 0820	0820 - 0826	0819 - 0825	0818 - 0824	0816 - 0822	0815 - 0821	0814 - 0820	0820 - 0826
35	0823 - 0829	0821 - 0827	0827 - 0902	0826 - 0901	0825 - 0831	0823 - 0829	0822 - 0828	0821 - 0827	0827 - 0902
36	0830 - 0905	0828 - 0903	0903 - 0909	0902 - 0908	0901 - 0907	0830 - 0905	0829 - 0904	0828 - 0903	0903 - 0909
37	0906 - 0912	0904 - 0910	0910 - 0916	0909 - 0915	0908 - 0914	0906 - 0912	0905 - 0911	0904 - 0910	0910 - 0916
38	0913 - 0919	0911 - 0917	0917 - 0923	0916 - 0922	0915 - 0921	0913 - 0919	0912 - 0918	0911 - 0917	0917 - 0923
39	0920 - 0926	0918 - 0924	0924 - 0930	0923 - 0929	0922 - 0928	0920 - 0926	0919 - 0925	0918 - 0924	0924 - 0930
40	0927 - 1003	0925 - 1001	1001 - 1007	0930 - 1006	0929 - 1005	0927 - 1003	0926 - 1002	0925 - 1001	1001 - 1007
41	1004 - 1010	1002 - 1008	1008 - 1014	1007 - 1013	1006 - 1012	1004 - 1010	1003 - 1009	1002 - 1008	1008 - 1014
42	1011 - 1017	1009 - 1015	1015 - 1021	1014 - 1020	1013 - 1019	1011 - 1017	1010 - 1016	1009 - 1015	1015 - 1021
43	1018 - 1024	1016 - 1022	1022 - 1028	1021 - 1027	1020 - 1026	1018 - 1024	1017 - 1023	1016 - 1022	1022 - 1028
44	1025 - 1031	1023 - 1029	1029 - 1104	1028 - 1103	1027 - 1102	1025 - 1031	1024 - 1030	1023 - 1029	1029 - 1104
45	1101 - 1107	1030 - 1105	1105 - 1111	1104 - 1110	1103 - 1109	1101 - 1107	1031 - 1106	1030 - 1105	1105 - 1111
46	1108 - 1114	1106 - 1112	1112 - 1118	1111 - 1117	1110 - 1116	1108 - 1114	1107 - 1113	1106 - 1112	1112 - 1118
47	1115 - 1121	1113 - 1119	1119 - 1125	1118 - 1124	1117 - 1123	1115 - 1121	1114 - 1120	1113 - 1119	1119 - 1125
48	1122 - 1128	1120 - 1126	1126 - 1202	1125 - 1201	1124 - 1130	1122 - 1128	1121 - 1127	1120 - 1126	1126 - 1202
49	1129 - 1205	1127 - 1203	1203 - 1209	1202 - 1208	1201 - 1207	1129 - 1205	1128 - 1204	1127 - 1203	1203 - 1209
50	1206 - 1212	1204 - 1210	1210 - 1216	1209 - 1215	1208 - 1214	1206 - 1212	1205 - 1211	1204 - 1210	1210 - 1216
51	1213 - 1219	1211 - 1217	1217 - 1223	1216 - 1222	1215 - 1221	1213 - 1219	1212 - 1218	1211 - 1217	1217 - 1223
52	1220 - 1226	1218 - 1224	1224 - 1230	1223 - 1229	1222 - 1228	1220 - 1226	1219 - 1225	1218 - 1224	1224 - 1230
53	1227 - 1231	1225 - 1231	1231 - 1231	1230 - 1231	1229 - 1231	1227 - 1231	1226 - 1231	1225 - 1231	1231 - 1231